INTRODUCTION

Deposits represent funds placed with the bank by customers that the bank is obligated to repay on demand, after a specific period of time, or after expiration of some required notice period. Deposits represent the primary funding source for most banks and, as a result, have a significant effect on a bank's liquidity. Although deposits are used by banks in a variety of ways, they primarily fund loans and investments. Management should establish a procedure for determining the volatility and the composition of the deposit structure to ensure that funds are employed profitably while allowing for their potential withdrawal. It is also important, therefore, for a bank's management to implement programs to retain and prudently expand the bank's deposit base.

Bankers place great significance on the deposit structure because favorable operating results depend, in part, on a core deposit base. Bank management should adopt and implement a development and retention program for all types of deposits because of competition for funds, the need for most individuals and corporations to minimize idle funds, and the effect of disintermediation (the movement of deposits to other higher yielding markets) on a bank's deposit base.

Deposit Development and Retention Program

Important elements of the examination process are the review of a bank's deposit development and retention program and the methods used to determine the volatility and composition of the deposit structure. The deposit development and retention program includes—

- a marketing strategy,
- projections of deposit structure and associated costs, and
- a formula for comparing results against projections.

To properly structure a deposit program, management must consider many factors, some of which include—

- the composition of the market area economic base,
- the ability to employ deposits profitably,
- the adequacy of current operations (staffing and systems) and the location and size of banking quarters relative to its volume of business,
- the degree of competition from banks and nonbank financial institutions and their programs to attract deposit customers, and
- the effects of the national economy and the monetary and fiscal policies of the federal government on the bank's service area.

The bank's size and the composition of its market determine how formal its deposit program should be. After a deposit program is developed, management must continue to monitor those factors and correlate any findings to determine if adjustments are needed. The long-term success of any deposit program relates directly to the ability of management to make adjustments at the earliest possible time.

Deposit Structure

Management should look not only at deposit growth, but also at the nature of the deposit structure. Management must be able to determine what percentage of the overall deposit structure is centered in core deposits, in fluctuating or seasonal deposits, and in volatile deposits to properly invest such funds in view of anticipated or potential withdrawals.

It is important that internal reports with information concerning the composition of the deposit structure be provided to management on a periodic basis. In analyzing the deposit structure, information gathered by the various examination procedures should be sufficient to allow the examiner to evaluate the composition of both volatile and core deposits. Management's lack of such knowledge could lead to an asset/liability mismatch, causing problems at a later date. Ultimately, the examiner should be satisfied with management's efforts to plan for the bank's future.

Examiners must analyze the present and potential effect deposit accounts have on the financial condition of the bank, particularly with regard to the quality and scope of management's

planning. The examiner's efforts should be directed to the various types of deposit accounts that the bank uses for its funding base. The examiners assigned to funds management and to analytical review of the bank's income and expenses should be informed of any significant change in interest-bearing deposit account activity.

Cost of Funds

Interest paid on deposits generally represents the largest expense to a bank. As a result, interest-bearing deposit accounts employed in a marginally profitable manner could have significant and lasting effects on bank earnings. The examiner should consider the following in evaluating the effect of interest-bearing deposit accounts on a bank's earnings:

- estimated change in interest expense resulting from a change in interest rates on deposit accounts or a shift in funds from one type of account to another
- service-charge income
- projected operating costs
- changes in required reserves
- promotional and advertising costs
- quality of management's planning

SPECIAL DEPOSIT-RELATED ISSUES

The examiner should keep in mind the following issues during an examination to ensure the bank is in compliance, where applicable.

Abandoned Property Law

State abandoned property laws are generally called escheat laws. Although escheat laws vary from state to state, they normally require a bank to remit the proceeds of any deposit account to the state treasurer when—

- the deposit account has been dormant for a certain number of years; and
- the owner of the account cannot be located.

Service charges on dormant accounts should bear a direct relationship to the cost of servicing the accounts to ensure that the charges are not excessive. The board of directors or a committee appointed by the board should review the basis on which service charges on dormant accounts are assessed, and the review should be documented. There have been occasions when, because of excessive charges, there were no proceeds to remit at the time the account became subject to escheat requirements, and courts have required banks to reimburse the state. (Also refer to the discussion on dormant accounts in the ''Potential Problem Areas'' subsection, below.)

Bank Secrecy Act

Examiners should be aware of the Bank Secrecy Act when examining the deposit area and follow up on any unusual activities or arrangements noted. The act was implemented by the Treasury Department's Financial Recordkeeping and Reporting of Currency and Foreign Transactions Regulation; for further information, see the *Bank Secrecy Act Examination Manual* and section 208.14 of the Federal Reserve's Regulation H.

Banking Hours and Processing of Demand Deposits

The Uniform Commercial Code (UCC) allows a bank to establish a banking day cut-off hour of 2:00 p.m. or later for the handling of items received for deposit or presented for payment (UCC 4-108). A ''banking day'' is defined as the part of a day on which the bank is open to the public for substantially all of its banking functions (UCC 4-104(a)(3)). Generally, a banking day includes, at a minimum, operation of a teller window and the bookkeeping and loan departments. Saturdays or Sundays could be banking days for banks that are open for substantially all of their functions on those days. Items received on a nonbanking day or after the cut-off hour on a banking day may be processed as if received on the following banking day.

A bank that violates the cut-off hour could be subject to civil liability for not performing its duties under other provisions of the UCC (see UCC 4-202, 4-213, 4-214, 4-301, and 4-302).

Foreign Currency Deposits

Domestic depository institutions are permitted to accept deposits denominated in foreign currency. Institutions should notify customers that such deposits are subject to foreign-exchange risk. The bank should convert such accounts to the U.S. dollar equivalent for reporting to the Federal Reserve. Examination staff should ascertain that all reports are in order, and evaluate the bank's use of such funds and management of the accompanying foreign-exchange risk. Foreign-currency denominated accounts are not subject to the requirements of Regulation CC, Availability of Funds and Collection of Checks. Refer to SR-90-3 (IB): Foreign (Non–U.S.) Currency Denominated Deposits Offered at Domestic Depository Institutions.

International Banking Facilities

An international banking facility (IBF) is a set of asset and liability accounts segregated on the books of a depository institution. IBF activities are essentially limited to accepting deposits from and extending credit to foreign residents (including banks), other IBFs, and the institutions establishing the IBF. IBFs are not required to maintain reserves against their time deposits or loans. The examiner should follow the special examination procedures in the international section of this manual when examining an IBF.

Pass-Through Deposit Insurance

''Pass-through'' deposit insurance applies to each owner or beneficiary that collectively participates in an employee benefit plan (EBP) account on deposit with an insured institution. Among the types of EBPs affected are 401(k) retirement accounts, Keogh plan accounts, and corporate pension plan and profit-sharing plan accounts. The FDIC insurance covers (passes through to) *each* owner or beneficiary of the applicable deposit up to $100,000 and is based on specific rules, including the insured institution's prompt-corrective-action (PCA) capital category as of each deposit date (see SR-95-39 sup). Depending on these rules, certain disclosures by the depository institution may be necessary.

These disclosures vary depending on the following circumstances: when requested by an administrator or manager of an existing EBP; upon opening an account; when pass-through insurance is no longer available; and in certain instances, when deposits were placed with an institution before July 1, 1995. Pass-through insurance coverage is provided for EBP deposits placed with all well-capitalized insured institutions and adequately capitalized institutions meeting certain requirements, both as defined by PCA. EBP deposits are not entitled to pass-through insurance coverage when placed with any PCA-designated under-capitalized institutions.

Reserve Requirements

The Monetary Control Act of 1980 and the Federal Reserve's Regulation D, Reserve Requirements of Depository Institutions, establish two categories of deposits for reserve requirement purposes. The first category is transaction deposit accounts, which represent a deposit or account from which the depositor or account holder is permitted to make orders of withdrawals by negotiable instrument, payment orders of withdrawal, telephone transfer, or similar devices for making payments to a third party or others. Transaction accounts include demand deposits, NOW accounts, ATS accounts, and telephone or preauthorized transfer accounts. The second category is nontransaction deposit accounts, which include all deposits that are not transaction accounts such as (1) savings deposits—money market deposit accounts and other savings deposits, and (2) time deposits—time certificates of deposit and time deposits, open account. Refer to Regulation D for specific definitions of the various deposit accounts.

Treasury Tax and Loan Accounts

Member banks may select either the ''remittance option'' or the ''note option'' method to forward deposited funds to the U.S. Treasury. With the remittance option, the bank remits the Treasury tax and loan accounts (TT&L) deposits to the Federal Reserve Bank the next business day after deposit. The remittance portion is not interest bearing.

The note option permits the bank to retain the TT&L deposits. With the note option, the bank

debits the TT&L remittance account the amount of the previous day's deposit and simultaneously credits the note option account. Thus, TT&L funds are now purchased funds evidenced by an interest-bearing, variable-rate, open-ended, secured note callable on demand by Treasury. Rates paid are ¼ of 1 percent less than the average weekly rate on federal funds. Interest is calculated on the weekly average daily closing balance in the TT&L note option account. Although there is no required maximum note option ceiling, banks may establish a maximum balance by providing written notice to the Federal Reserve Bank. As per 31 CFR 203.15, the TT&L balance requires the bank to pledge collateral to secure these accounts, usually from its investment portfolio. The note option is not included in reserve requirement computations and is not subject to deposit insurance because it is classified as a demand note issued to the U.S. Treasury, a type of borrowing.

POTENTIAL PROBLEM AREAS

The following paragraphs discuss the types of deposit accounts and related activities that have above-average risk and, therefore, require the examiner's special attention.

Bank-Controlled Deposit Accounts

Bank-controlled deposit accounts, such as suspense, official checks, cash collateral, dealer reserves, and undisbursed loan proceeds, are used to perform many necessary banking functions. However, the absence of sound administrative policies and adequate internal controls can cause significant loss to the bank. To ensure that such accounts are properly administered and controlled, the directorate must ensure that operating policies and procedures are in effect that establish acceptable purpose and use; appropriate entries; controls over posting entries; and the length of time an item may remain unrecorded, unposted, or outstanding. Internal controls that limit employee access to bank-controlled accounts, determine the responsibility for frequency of reconcilement, discourage improper posting of items, and provide for periodic internal supervisory review of account activity are essential to efficient deposit administration.

The deposit suspense account is used to process unidentified, unposted, or rejected items. Characteristically, items posted to such accounts clear in one business day. The length of time an item remains in control accounts often reflects on the bank's operational efficiency. This deposit type has a higher risk potential because the transactions are incomplete and require manual processing to be completed. As a result of the need for human interaction and the exception nature of these transactions, the possibility of misappropriation exists.

Official checks, a type of demand deposit, include bank checks, cashier's checks, expense checks, interest checks, dividend payment checks, certified checks, money orders, and traveler's checks. Official checks reflect the bank's promise to pay a specified sum upon presentation of the bank's check. Because accounts are controlled and reconciled by bank personnel, it is important that appropriate internal controls are in place to ensure that account reconcilement is segregated from check origination. Operational inefficiencies, such as unrecorded checks that have been issued, can result in a significant understatement of the bank's liabilities. Misuse of official checks may result in substantial losses through theft.

Cash collateral, dealer differential or reserve, undisbursed loan proceeds, and various loan escrow accounts are also sources of potential loss. The risk lies in inefficiency or misuse if the accounts become overdrawn or if funds are diverted for other purposes, such as the payment of principal or interest on bank loans. Funds deposited to these accounts should be used only for their stated purposes.

Brokered Deposits

Brokered deposits represent funds the reporting bank obtains, directly or indirectly, by or through any deposit broker for deposit into one or more deposit accounts. Thus, brokered deposits include both those in which the entire beneficial interest in a given bank deposit account or instrument is held by a single depositor and those in which the deposit broker pools funds from more than one investor for deposit in a given bank deposit account.

The Federal Deposit Insurance Act (FDIA) defines "deposit broker" to mean "(A) any person engaged in the business of placing depos-

its, or facilitating the placement of deposits, of third parties with insured depository institutions or the business of placing deposits with insured depository institutions for the purpose of selling interests in those deposits to third parties; and (B) an agent or trustee who establishes a deposit account to facilitate a business arrangement with an insured depository institution to use the proceeds of the account to fund a prearranged loan." Exceptions to this definition are allowed for certain fiduciary relationships.

A small or medium-sized bank's dependence on the deposits of customers who reside outside of or conduct their business outside of the bank's normal service area should be closely monitored by the bank and analyzed by the examiner. Such deposits may be the product of personal relationships or good customer service; however, large out-of-area deposits are sometimes attracted by liberal credit accommodations or by offering significantly higher interest rates than competitors offer. Deposit growth due to liberal credit accommodations generally proves costly in terms of the credit risks taken relative to the benefits received from corresponding deposits, which may be less stable. Banks outside dynamic metropolitan areas are limited in growth because they usually can maintain stable deposit growth only as a result of prudent reinvestment in the bank's service area. Deposit development and retention policies should recognize the limits imposed by prudent competition and the bank's service area.

Banking organizations have historically relied to a limited extent upon funds obtained through deposit brokers to supplement their traditional funding sources. A concern regarding the activities of deposit brokers is that the ready availability of large amounts of funds through the

issuance of insured obligations undercuts market discipline.

The use of brokered deposits by sound, well-managed banks can play a legitimate role in the asset/liability management of a bank and enhance the efficiency of financial markets. However, the use of brokered deposits can also contribute to the weakening of a bank by allowing it to grow at an unmanageable or imprudent pace and can exacerbate the condition of a troubled bank.

Large depositors and deposit brokers with $100,000 or more to invest may divide their deposits into instruments in denominations of less than $100,000. In these situations, repayment no longer depends solely on the financial condition of the depository institution because federal deposit insurance is available for deposits of less than $100,000. As a result, a bank, regardless of its financial or managerial characteristics, could potentially engage in imprudent funding practices such as raising large amounts of volatile funds by purchasing brokered deposits.

To compensate for the high rates typically offered for brokered deposits, institutions holding them tend to seek assets that carry commensurately high yields. These assets can often involve excessive credit risk or cause the bank to take on undue interest-rate risk through a mismatch in the maturity of assets and liabilities.

In light of these concerns, certain restrictions on the use of brokered deposits were developed under section 301 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA). Section 301 of FDICIA amended section 29 of FDIA to prohibit undercapitalized institutions from accepting funds obtained, directly or indirectly, by or through any deposit broker for deposit into one or more deposit accounts. Adequately capitalized institutions may accept such funds only if they first obtain a waiver from the FDIC, while well-capitalized institutions may accept such funds without restriction.

The FDIC's regulation implementing section 301 of FDICIA provides the definitions of well-capitalized, adequately capitalized, and undercapitalized institutions, which are tied to percentages of leverage and risk-based capital. Well-capitalized institutions have—

- a ratio of total capital to risk-weighted assets of not less than 10 percent;
- a ratio of tier 1 capital to risk-weighted assets of not less than 6 percent;
- a ratio of tier 1 capital to total book assets of not less than 5 percent; and
- not been notified by their appropriate federal banking agency that they are in a troubled condition.

An undercapitalized institution fails to meet the minimum regulatory capital requirements set by its federal regulatory agency. An adequately capitalized institution is one that is neither well-capitalized nor undercapitalized.

Section 29 of FDIA, as amended, also limits the rates of interest on deposits that may be offered by insured depository institutions that are undercapitalized or adequately capitalized, and requires deposit brokers to notify the FDIC of their status as a broker before soliciting or placing deposits with an insured depository institution.

The FDIC's implementing rule further specifies that an insured depository institution (and its employees) would be considered to be a deposit broker if it were to solicit deposits at more than 75 basis points over the prevailing rates (effective yields) on deposits within the bank's normal market area, or above the ''national rate'' for deposits outside the normal market area. The ''national rate'' is 120 percent of the current yield on similar maturity U.S. Treasury obligations when considering insured (retail) deposits, and 130 percent of the aforementioned yield when at least half of the deposits are uninsured due to their size or nature (institutional).

Each examination should include a review for compliance with the FDIC's limitations on the acceptance of brokered deposits and guidelines on interest payments.

The use of brokered deposits should be reviewed during all on-site examinations, even for those institutions not subject to the FDIC's restrictions. In light of the potential risks accompanying the use of brokered deposits, the examination should focus on the—

- rate of growth and the credit quality of the loans or investments funded by brokered deposits;
- corresponding quality of loan files, documentation, and customer credit information;
- ability of bank management to adequately evaluate and administer these credits and manage the resulting growth;
- degree of interest-rate risk involved in the

funding activities and the existence of a possible mismatch in the maturity or rate-sensitivity of assets and liabilities;
- composition and stability of the deposit sources and the role of brokered deposits in the bank's overall funding position and strategy; and
- effect of brokered deposits on the bank's financial condition and whether or not the use of brokered deposits constitutes an unsafe and unsound banking practice.

In light of the preceding discussion, the examiner should identify relevant concerns in the examination report when brokered deposits amount to 5 percent or more of the bank's total deposits.

Check Kiting

Check kiting occurs when—

- a depositor with accounts at two or more banks draws checks against the uncollected balance at one bank to take advantage of the float—that is, the time required for the bank of deposit to collect from the paying bank; and
- the depositor initiates the transaction with the knowledge that sufficient collected funds will not be available to support the amount of the checks drawn on all of the accounts.

The key to this deceptive practice, the most prevalent type of check fraud, is the ability to draw against uncollected funds. However, drawing against uncollected funds in and of itself does not necessarily indicate kiting. Kiting only occurs when the aggregate amount of drawings exceeds the sum of the collected balances in all accounts. Nevertheless, since drawing against uncollected funds is the initial step in the kiting process, management should closely monitor this activity. The requirements of Regulation CC, Availability of Funds and Collection of Checks, increased the risk of check kiting, and should be addressed in a bank's policies and procedures.

By allowing a borrower to draw against uncollected funds, the bank is extending credit that should be subject to an appropriate approval process. Accordingly, management should promptly investigate unusual or unauthorized activity since the last bank to recognize check kiting and pay on the uncollected funds suffers the loss. Check kiting is illegal and all suspected or known check kiting operations should be reported pursuant to established Federal Reserve policy. Banks should maintain internal controls to preclude loss from kiting, and the examiner should remember that in most cases kiting is not covered under Blanket Bond Standard Form 24.

Delayed Disbursement Practices

Although Regulation CC, Availability of Funds and Collection of Checks, stipulates time frames for funds availability and return of items, delayed disbursement practices (also known as remote disbursement practices) can present certain risks, especially concerning cashier's checks, which have next-day availability. Delayed disbursement is a common cash management practice that consists of arrangements designed to delay the collection and final settlement of checks by drawing checks on institutions located substantial distances from the payee or on institutions located outside the Federal Reserve cities when alternate and more efficient payment arrangements are available. Such practices deny depositors the availability of funds to the extent that funds could otherwise have been available earlier. A check drawn on an institution remote from the payee often results in increased possibilities of check fraud and in higher processing and transportation costs for return items.

Delayed disbursement arrangements could give rise to supervisory concerns because a bank may unknowingly incur significant credit risk through such arrangements. The remote location of institutions offering delayed disbursement arrangements often increases the collection time for checks by at least a day. The primary risk is payment against uncollected funds, which could be a method of extending unsecured credit to a depositor. Absent proper and complete documentation regarding the creditworthiness of the depositor, paying items against uncollected funds could be considered an unsafe or unsound banking practice. Furthermore, such loans, even if properly documented, might exceed the bank's legal lending limit for loans to one customer.

Examiners should routinely review a bank's practices in this area to ensure that such practices are conducted prudently. If undue or undocumented credit risk is disclosed or if lending limits are exceeded, appropriate corrective action should be taken.

Deposit Sweep Programs/Master Note Arrangements

Deposit sweep programs/master note arrangements (sweep programs) can be implemented on a bank level or on a parent bank holding company (BHC) level. On a bank level, these sweep programs exist primarily to facilitate cash management needs of bank customers, thereby retaining customers who might otherwise move their account to an entity offering higher yields. On a BHC level, the sweep programs are maintained with customers at the bank level and the funds are upstreamed to the parent as part of the BHC's funding strategy. Sweep programs use an agreement with the bank's deposit customers (typically corporate accounts) that permits these customers to reinvest amounts in their deposit accounts above a designated level in overnight obligations of the parent bank holding company, another affiliate of the bank, or a third party. These obligations include such instruments as commercial paper, program notes, and master note agreements.

The disclosure agreement regarding the sale of these types of nondeposit debt obligations should include a statement indicating that these instruments are not federally insured deposits, or obligations of or guaranteed by an insured depository institution. In addition, banks and their subsidiaries that have issued or plan to issue nondeposit debt obligations should not market or sell these instruments in any public area of the bank where retail deposits are accepted, including any lobby area of the bank. This requirement exists to convey the impression or understanding that the purchase of such obligations by retail depositors of the subsidiary bank can, in the event of default, result in losses to individuals who believed they had acquired federally insured or guaranteed obligations.

Bank Policies and Procedures

Banking organizations with sweep programs should have adequate policies, procedures, and internal controls in place to ensure that the activity is conducted in a manner consistent with safe and sound banking principles and in accordance with all banking laws and regulations. Bank policies and procedures should further ensure that deposit customers participating in a sweep program are given proper disclosures and information. When a sweep program is used as part of a funding strategy for a BHC or a nonbank affiliate, examiners should ensure that liquidity and funding strategies are carried out in a prudent manner.

Application of Deposit Proceeds

In view of the extremely short-term maturity of most swept funds, banks and BHCs are expected to exercise great care when investing the proceeds. Banks, from whom deposit funds are swept, have a fiduciary responsibility to their customers to ensure that such transactions are conducted properly. Appropriate uses of the proceeds of deposit sweep funds are limited to short-term bank obligations, short-term U.S. government securities, or other highly liquid, readily marketable, investment-grade assets that can be disposed of with minimal loss of principal.[1] In cases where deposit sweep funds are invested in U.S. government securities, appropriate agreements must be in place, required disclosures must be made, and daily confirmations must be provided to the customer in accordance with the requirements of the Government Securities Act of 1986. Use of such proceeds to finance mismatched asset positions, such as those involving leases, loans, or loan participations, can lead to liquidity problems and are not considered appropriate. The absence of a clear ability to redeem overnight or extremely short-term liabilities when they become due should generally be viewed as an unsafe and unsound banking activity.

Funding Strategies

A key principle underlying the Federal Reserve's supervision of banking organizations is that BHCs operate in a way that promotes the

1. Some banking organizations have interpreted language in a 1987 letter signed by the Secretary of the Board as condoning funding practices that may not be consistent with the principles set forth in a subsequent supervisory letter dated September 21, 1990, as well as with prior Board rulings. The 1987 letter involved a limited set of facts and circumstances that pertained to a particular banking organization; it did not establish or revise Federal Reserve policies on the proper use of the proceeds of short-term funding sources. In any event, banking organizations should no longer rely on the 1987 letter to justify the manner in which they use the proceeds of sweep programs. Banking organizations employing sweep programs are expected to ensure that these programs conform with the policies contained in this manual section.

soundness of their subsidiary banks. BHCs are expected to avoid funding strategies or practices that could undermine public confidence in the liquidity or stability of their banks. Any funding strategy should maintain an adequate degree of liquidity at both the parent level and the subsidiary bank. Bank management should avoid, to the extent possible, allowing sweep programs to serve as a source of funds for inappropriate uses at the BHC or at an affiliate. Concerns exist in this regard because funding mismatches can exacerbate an otherwise manageable period of financial stress and, in the extreme, undermine public confidence in a banking organization's viability.

Funding Programs

In developing and carrying out funding programs, BHCs should give special attention to the use of overnight or extremely short-term liabilities, since a loss of confidence in the issuing organization could lead to an immediate funding problem. Thus BHCs relying on overnight or extremely short-term funding sources should maintain a sufficient level of superior-quality assets that can be immediately liquidated or converted to cash with minimal loss, at least equal to the amount of those funding sources.

Dormant Accounts

A dormant account is one in which customer-originated activity has not occurred for a predetermined period of time. Because of this inactivity, dormant accounts are frequently the target of malfeasance and should be carefully controlled by a bank. Bank management should establish standards that specifically outline the bank's policy for the effective control of dormant accounts, addressing—

- the types of deposit categories that could contain dormant accounts, including demand, savings, and official checks;
- the length of time without customer-originated activity that qualifies an account to be identified as dormant;
- the controls exercised over the accounts and their signature cards, that is, prohibiting release of funds by a single bank employee; and
- the follow-up by the bank when ordinary bank mailings, such as account statements and advertising flyers, are returned to the bank because of changed addresses or other reasons for failure to deliver.

Employee Deposit Accounts

Historically, examiners have discovered various irregularities and potential malfeasance through review of employee deposit accounts. As a result, bank policy should establish standards that segregate or specially encode employee accounts and encourage periodic internal supervisory review. In light of these concerns, examiners should review related bank procedures and practices, taking appropriate measures when warranted.

Overdrafts

The size, frequency, and duration of deposit account overdrafts are matters that should be governed by bank policy and controlled by adequate internal controls, practices, and procedures. Overdraft charges should be significant enough to discourage abuse. Overdraft authority should be approved in the same manner as lending authority and should never exceed the employee's lending authority. Systems for monitoring and reporting overdrafts should emphasize a secondary level of administrative control that is distinct from other lending functions so account officers who are less than objective do not allow influential customers to exploit their overdraft privileges. An examiner should also be aware that Regulation O addresses the payment of overdrafts to executive officers or directors of a bank. It is the board of directors' responsibility to review overdrafts as they would any other extension of credit. In most cases, overdrafts outstanding for more than 30 days, lacking mitigating circumstances, should be considered for charge-off.

Payable-Through Accounts

A payable-through account is an accommodation offered to a correspondent bank or other customer by a U.S. banking organization whereby drafts drawn against client subaccounts at the

correspondent are paid upon presentation by the U.S. banking institution. The subaccount holders of the payable-through bank are generally non–U.S. residents or owners of businesses located outside of the United States. Usually the contract between the U.S. banking organization and the payable-through bank purports to create a contractual relationship solely between the two parties to the contract. Under the contract, the payable-through bank is responsible for screening subaccount holders and maintaining adequate records with respect to such holders. The examiner should be aware of the potential effect of money laundering.

Public Funds

Public funds generally represent deposits of the U.S. government, as well as state and political subdivisions, and typically require collateral in the form of securities to be pledged against them. A bank's reliance upon public funds can cause potential liquidity concerns if the aggregate amount, as a percentage of total deposits, is material relative to the bank's asset/liability management practices. Another factor that can cause potential liquidity concerns relates to the volatile nature of these deposits.

This volatility occurs because the volume of public funds normally fluctuates on a seasonal basis due to timing differences between tax collections and expenditures. A bank's ability to attract public funds is typically based upon the government entity's assessment of three key points:

- the safety and soundness of the institution with which the funds have been placed
- the yield on the funds being deposited
- that such deposits are placed with a bank that can provide or arrange the best banking service at the least cost

Additionally, banks that offer competitive interest rates and provide collection, financial advisory, underwriting, and data processing services at competitive costs are frequently chosen as depositories. Public funds deposits acquired through political influence should be regarded as particularly volatile. As a result, an examiner should pay particular attention to assessing the volatility of such funds in conjunction with the review of liquidity.

Zero-Balance Accounts

Zero-balance accounts (ZBAs) are demand deposit accounts used by a bank's corporate customers through which checks or drafts are received for either deposit or payment. The total amount received on any particular day is offset by a corresponding debit or credit to the account before the close of business to maintain the balance at or near zero. ZBAs enable a corporate treasurer to effectively monitor cash receipts and disbursements. For example, as checks arrive for payment, they are charged to a ZBA with the understanding that funds to cover the checks will be deposited before the end of the banking day. Several common methods used to cover checks include—

- wire transfers;
- depository transfer checks, a bank-prepared payment instrument used to transfer money from a corporate account in one bank to another bank;
- concentration accounts, a separate corporate demand deposit account at the same bank used to cover deficits or channel surplus funds relative to the ZBA; or
- extended settlement, a cash-management arrangement that does not require the corporate customer to provide same-day funds for payment of its checks.

Because checks are covered before the close of business on the day they arrive, the bank's exposure is not reflected in the financial statement. The bank, however, assumes risk by paying against uncollected funds, thereby creating unsecured extensions of credit during the day (which is referred to as a daylight overdraft between the account holder and the bank). If these checks are not covered, an overdraft occurs, which will be reflected on the bank's financial statement.

The absence of prudent safeguards and a lack of full knowledge of the creditworthiness of the depositor may expose the bank to large, unwarranted, and unnecessary risks. Moreover, the magnitude of unsecured credit risk may exceed prudent limits. Examiners should routinely review cash management policies and procedures to ensure that banks do not engage in unsafe and unsound banking practices, making appropriate comments in the report of examination, as necessary.

1. To determine if the policies, practices, procedures, and internal controls regarding deposit accounts are adequate.
2. To determine if bank officers and employees are operating in conformance with the bank's established guidelines.
3. To evaluate the deposit structure and determine its characteristics and volatility.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with applicable laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient, or when violations of laws or regulations are noted.

1. Determine the scope of the examination of the deposit-taking function. In so doing, consider the findings of prior examinations, related work prepared by internal and external auditors, deficiencies in internal controls noted within other bank functions, and the requirements of examiners assigned to review the asset/liability management and interest-rate risk aspects of the bank.
2. If required by the scope, implement the Deposit Accounts Internal Control Questionnaire.
3. Test the deposit function for compliance with policies, procedures, and internal controls in conjunction with performing the remaining examination procedures. Also, obtain a listing of any deficiencies noted in the latest internal/external audit review and determine if appropriate corrections have been made.
4. In conducting an examination, the examiner should use available bank copies of printouts plus transactions journals, microfiche, or other visual media to minimize expense to the bank. However, if copies of these reports are not available, the examiner should determine and request the information necessary to complete the examination procedures.

   Obtain or prepare, as applicable, the reports indicated below, which are used for a variety of purposes, including the assessment of deposit volatility and liquidity, adequacy of internal controls, verification of information contained on required regulatory reports, and assessment of loss.

   a. For demand deposits and other transaction accounts:
      - Trial balance;
      - Overdrafts;
      - Unposted items;
      - Nonsufficient funds (NSF) report;
      - Dormant accounts;
      - Public funds;
      - Uncollected funds;
      - Due to banks;
      - Trust department funds;
      - Significant activity;
      - Suspected kiting report;
      - Matured certificates of deposits without an automatic renewal feature; and
      - Large balance report.

   b. For official checks:
      - Trial balance(s); and
      - Exception list.

   c. For savings accounts:
      - Trial balance;
      - Unposted items;
      - Overdrafts;
      - Dormant accounts;
      - Public funds;
      - Trust department funds; and
      - Large balance report.

   d. For other time deposits:
      - Trial balance(s);
      - Large balance report;
      - Unposted items;
      - Public funds;
      - Trust department funds; and
      - Money market accounts.

   e. For certificates of deposit:
      - Trial balance(s);
      - Unposted items;
      - Public funds;
      - Certificates of $100,000 or more;
      - Negotiable certificates of deposit;
      - Maturity reports; and
      - Matured certificates of deposit.

   f. For deposit sweep programs/master note arrangements:
      - List individually by deposit type and amount.

   g. For brokered deposits:
      - List individually by deposit type, including amount and rate.

   h. For bank-controlled accounts:
      - Reconcilement records for all such accounts;
      - Names and extensions of individuals authorized to make entries to such accounts; and
      - Name and phone extension of reconcilement clerk(s).

   i. For foreign currency deposits:
      - List of accounts and currency type; and
      - Copy of the most recent Report of Foreign Currency Deposits, form FR 2915.

5. Review the reconcilement of all types of deposit accounts and verify the balances to department controls and the general ledger, then—
   a. determine if reconciliation items are legitimate and if they clear within a reasonable time frame; and
   a. retain custody of all trial balances until items outstanding are resolved.
6. Review the reconciliation process for bank-controlled accounts, such as official checks and escrow deposits, by—
   a determining if reconciling items are legitimate and if they clear within a reasonable time frame;
   b. scanning activity in such accounts to determine the potential for improper diversion of funds for various uses, such as—
      • political contributions,
      • loan payments (principal and interest), or
      • personal use; and
   c. determine if checks are being processed before their related credits.
7. Review the bank's operating procedures and reconciliation process relative to suspense accounts and determine if—
   a. the disposition process of unidentified items is completed in a timely fashion;
   b. reports are generated periodically to inform management of the type, age, and amount of items in such accounts; and
   c. employees responsible for clearing suspense account items are not shifting the items between accounts.
8. Evaluate the effectiveness of the policies, procedures, and management's reporting methods regarding overdrafts and drawings against uncollected funds.
   a. Concerning overdrafts, determine if—
      • officer-approval limits have been established; and
      • a formal system of review and approval is in effect.
   b. Ascertain the existence of formal overdraft protection, and, if it exists—
      • obtain a master list of all depositors with formal overdraft protection;
      • obtain a trial balance indicating advances outstanding and compare it with the master list to ensure compliance with approved limits;
      • cross-reference the trial balance or master list to examiner loan line sheets; and
      • review credit files on significant formal agreements not cross-referenced above.
   c. Concerning drawings against uncollected funds, determine if—
      • the uncollected funds report reflects balances as uncollected until they are actually received;
      • management is comparing reports of significant changes in balances and activity volume to uncollected funds reports;
      • management knows the reasons why a depositor is frequently drawing against uncollected funds;
      • a reporting system to inform senior management of significant activity in this area has been instituted; and
      • appropriate employees clearly understand the mechanics of drawing against uncollected funds and the risks involved, especially in the area of potential check kiting operations.
   d. Upon completing steps 8.a., 8.b., and 8.c., the examiner should—
      • cross-reference overdraft and uncollected funds reports to examiner loan line sheets;
      • review the credit files of depositors with significant overdrafts, if available, or the credit files of depositors who frequently draw significant amounts against uncollected funds, for those depositors not cross-referenced in the preceding step;
      • request management to charge-off overdrafts deemed to be uncollectible by examiners; and
      • submit a list of the following items to the appropriate examiner:
        — Overdrafts considered loss, indicating borrower and amount.
        — Aggregate amounts overdrawn 30 days or more, for inclusion in past-due statistics.
9. Review the bank's deposit development and retention policy, which is often included in the funds management policy.
   a. Determine if the policy addresses deposit structure and related interest costs, including the percentages of time deposits and demand deposits of—
      • individuals,

- corporations, and
- public entities.

b. Also determine if the policy requires periodic reports to management comparing the accuracy of projections with results.
c. Assess the reasonableness of the policy and ensure that it is routinely reviewed by management.

10. If a deposit sweep program/master note arrangement exists, review the minutes of the board of directors for approval of related policies and procedures.
11. For banks with deposit sweep programs/master note arrangements (sweep programs), compare practices for adherence to approved policies and procedures, including a review of—
    a. the purpose of the sweep program: is it strictly a customer accommodation transaction, or is it intended to fund certain assets at the holding company level or at an affiliate? Review funding transactions in light of liquidity and funding needs of the banking organization by referring to the manual section on asset/liability management.
    b. the eligibility requirements used by the bank to determine the types of customers and accounts that may participate in a sweep program, including—
        - a list of customers participating in sweep programs, with dollar amounts of deposit funds swept on the date of examination.
        - the name of the recipient(s) of swept funds and—
            — if an affiliate of the bank, a schedule of the instruments into which the funds were swept, including the effective maturity of these instruments.
            — if an unaffiliated third party, determine if the bank adequately evaluates the third party's financial condition at least annually. Also, verify if a fee is received by the bank for the transaction, and if so, that it is disclosed in customer documentation.
    c. whether the proceeds of sweep programs are invested only in short-term bank obligations, short-term U.S. government securities, or other highly liquid, readily marketable, investment-grade assets that can be disposed of with minimal loss of principal.
    d. whether the bank and its subsidiaries have issued or plan to issue nondeposit debt obligations in any public area of the bank where retail deposits are accepted, including any lobby area of the bank.
    e. completed sweep program documents to determine if—
        - signed documents boldly disclose that the instrument into which deposit funds will be swept is not insured by the FDIC and is not an obligation of, or guaranteed by, the bank.
        - proper authorization for the instrument exists between the customer and an authorized representative of the bank.
        - signed documents properly disclose the name of the obligor and type of instrument into which the depositor's funds will be swept. If funds are being swept into U.S. government securities held by the banking organization, verify that adequate confirmations are provided to customers in accordance with the Government Securities Act of 1986. (This act requires that all transactions subject to a repurchase agreement be confirmed in writing at the end of the day of initiation, and that the confirmation confirms specific securities. If any other securities are substituted that result in a change of issuer, maturity date, par amount, or coupon rate, another confirmation must be issued at the end of the day during which the substitution occurred. Because the confirmation or safekeeping receipt must list specific securities, ''pooling'' of securities for any type of sweep program involving government securities is not permitted. Additionally, if funds are swept into other instruments, similar confirmation procedures should be applied.)
        - conditions of the sweep program are stated clearly, including the dollar amount (minimum or maximum amounts, and incremental amounts), time frame of sweep, time of day sweep transaction occurs, fees payable, transaction confirmation notice, prepayment terms, and termination notice.
        - the length of any single transaction

under sweep programs in effect has not exceeded 270 days and the amount is $25,000 or more (as stipulated by SEC policy). Ongoing sweep program disclosures should occasionally be sent to the customer to ensure that the terms of the program are updated and the customer understands the terms.

f. samples of advertisements (newspaper, radio, and television spots, etc.) by the bank for sweep programs to determine if the advertisements—
   - boldly disclose that the instrument into which deposit funds are swept is not insured by the FDIC and is not an obligation of, or guaranteed by, the bank.
   - are not enclosed with insured deposit statements mailed to customers.

g. whether the sweep program has had a negative effect on bank liquidity or has the potential to undermine public confidence in the bank. Also—
   - review the bank's fed funds and borrowing activities to ascertain whether borrowings appear high. If so, compare the bank's borrowing activity with daily balances of aggregate sweep transactions on selected dates to see if a correlation exists.
   - if sweep activity is significant, compare the rates being paid on swept deposits with the yields received on the invested funds and with the rates on other overnight funding instruments, such as fed funds, to determine if they are reasonable.

12. Forward the following to the examiner assigned to asset/liability management:
    a. The amount of any deposit decline or deposit increase anticipated by management (the time period will be determined by the examiner performing asset/liability management).
    b. A listing by name and amount of any depositor controlling more than 1 percent of total deposits.
    c. A listing, if available, by name and amount of any deposits held solely because of premium rates paid (brokered deposits).
    d. The aggregate amount of brokered deposits.
    e. A maturity schedule of certificates of deposit, detailing maturities within the next 30, 60, 90, 180, and 360 days.
    f. An assessment of the overall characteristics and volatility of the deposit structure.
13. Analyze UBPR data on deposits and related expense ratios and compare with peer group norms to determine—
    a. variations from the norm; and
    b. trends in the deposit structure with respect to—
       - growth patterns and
       - shifts between deposit categories.
14. Assess the volatility and the composition of the bank's deposit structure.
    a. Review the list of time certificates of deposit of $100,000 or more, and related management reports, including those on brokered deposits, to determine—
       - whether concentrations of maturing deposits exist;
       - whether a concentration of deposits to a single entity exists;
       - the aggregate dollar volume of accounts of depositors outside the bank's normal service area, if significant, and the geographic area(s) from which any significant volume emanates;
       - the aggregate dollar volume of CDs with interest rates higher than current publicly quoted rates within the market;
       - whether the bank is paying current market rates on CDs;
       - the dollar amount of brokered CDs, if any; and
       - the dollar volume of deposits obtained as a result of special promotions.
    b. Review public funds and the bank's method of acquiring such funds to assess whether the bank uses competitive bidding in setting the interest rate paid on public deposits. If so, does the bank consider variables in addition to rates paid by competition in determining pricing for bidding on public deposits?
    c. Review appropriate trial balances for all other deposits (demand, savings, and other time deposits) and/or management reports that relate to large deposits for individuals, partnerships, corporations, and related deposit accounts to determine whether a deposit concentration exists.
       - Select, at a minimum, the 10 largest

accounts to determine if the retention of those accounts depends on—
- — criticizable loan relationships;
- — liberal service accommodations, such as permissive overdrafts and drawings against uncollected funds;
- — interbank correspondent relationships;
- — deposits obtained as a result of special promotions; and
- — a recognizable trend with respect to—
  - • frequent significant balance fluctuations,
  - • seasonal fluctuations, and
  - • nonseasonal increases or decreases in average balances.

d. Elicit management's comments to determine, to the extent possible—
- • the potential renewal of large CDs that mature within the next 12 months;
- • if public fund deposits have been obtained through political influence;
- • if a significant dollar volume of accounts is concentrated in customers engaged in a single business or industry; and
- • if there is a significant dollar volume of deposits of customers who do not reside within the bank's service area.

15. Obtain information on competitive pressures and economic conditions from the examiner responsible for the "Economic Conditions and Competition" report section, and evaluate that information, along with current deposit trends, to estimate their effect on the bank's deposit structure.
16. Test for compliance with the applicable laws and regulations listed below by performing the following procedures:
    a. Regulation O (12 CFR 215), Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks:
    - Review the overdraft listing to ensure that the bank has not paid an overdraft on any account of an executive officer or director, unless the payment is made according to—
      - — a written, preauthorized, interest-bearing extension of a credit plan providing for a method of repayment, or
      - — a written, preauthorized transfer from another account of that executive officer or director.

      Payment of inadvertent overdrafts in an aggregate amount of $1,000 or less is not prohibited, provided the account is not overdrawn more than five business days and the executive officer or director is charged the same fee charged other customers in similar circumstances. Overdrafts are extensions of credit and must be included when considering each insider's lending limits and other extensions of credit restrictions, as well as the aggregate lending limit for all outstanding extensions of credit by the bank to all insiders and their related interests.

    b. 12 USC 1972(2), Loans to Executive Officers, Directors, and Principal Shareholders of Correspondent Banks:
    - Review the overdraft listing to ensure that no preferential overdrafts exist from the bank under examination to the executive officers, directors, or principal shareholders of the correspondent bank.

    c. Section 22(e) of the Federal Reserve Act (12 USC 376), Interest on Deposits of Directors, Officers, and Employees:
    - Obtain a list of deposit accounts, with account numbers, of directors, officers, attorneys, and employees. Review the accounts for any exceptions to standard policies on service charges and interest rates paid that would suggest self-dealing or preferential treatment.

    d. Sections 23A and 23B of the Federal Reserve Act (12 USC 371c):
    - Determine the existence of any overdrawn affiliate accounts. If overdrawn accounts are identified, review for compliance with sections 23A and 23B of the act.

    e. Section 301 of the Federal Deposit Insurance Corporation Improvement Act of 1991:
    - If the bank is undercapitalized, as defined in the regulation implementing section 301 of FDICIA, ensure that it is not accepting brokered deposits.
    - If the bank is only adequately capitalized, as defined in the regulation implementing section 301 of FDICIA, and is accepting brokered deposits, ensure that a waiver authorizing acceptance of such deposits has been obtained from the FDIC and that the

bank is in compliance with the interest rate restrictions.

f. Regulation D (12 CFR 204), Reserve Requirements of Depository Institutions:
   - Review the accuracy of the deposit data used in the bank's reserve requirement calculation for the examination date. In cases where a bank issues nondeposit, uninsured obligations that are classified as "deposits" in the calculation of reserve requirements, examiners should determine if these items are properly categorized. Ascertain that the TT&L remittance option is included in the computations for reserve requirements.

g. Regulation Q (12 CFR 217), Prohibition Against Payment of Interest on Demand Deposits:
   - Ensure that interest is not being paid on the proceeds of nonautomatically renewable matured certificates of deposit held in demand deposit accounts (as opposed to NOW accounts, which permit the payment of interest).

h. 12 USC 501 and 18 USC 1004, False Certification of Checks:
   - Compare several certified checks by date, amount, and purchaser with depositors' names appearing on uncollected funds and overdraft reports of the same dates to determine that the checks were certified against collected funds.

i. Uniform Commercial Code 4-108, Banking Hours and Processing of Items:
   - Determine the bank's cut-off hour, after which items received are included in the processing for the next "banking day," to ensure that the cut-off hour is not earlier than 2:00 p.m.
   - If the bank's cut-off hour is before 2:00 p.m., advise management that failure to process items received before a 2:00 p.m. cutoff may result in civil liability for delayed handling of those items.

j. Local escheat laws:
   - Determine if the bank is adhering to the local escheat laws with regard to all forms of dormant deposits, including official checks.

17. If applicable, determine if the bank is appropriately monitoring and limiting the foreign exchange risk associated with foreign currency deposits.
18. Discuss overall findings with bank management and prepare report comments on—
    a. policy deficiencies;
    b. noncompliance with policies;
    c. weaknesses in supervision and reporting;
    d. violations of laws and regulations; and
    e. possible conflicts of interest.
19. Update workpapers with any information that will facilitate future examinations.

Review the bank's internal controls, policies, practices, and procedures for demand and time deposit accounts. The bank's systems should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used, and other pertinent information.

For large institutions and/or those institutions with individual demand and time deposit bookkeeping functions, the examiner should consider administering this questionnaire separately for each function, as applicable.

Questions pertain to both demand and time deposits unless otherwise indicated. Negative responses to the questions in this section should be explained, and additional procedures deemed necessary should be discussed with the examiner-in-charge. Items marked with an asterisk require substantiation by observation or testing.

OPENING DEPOSIT ACCOUNTS

*1. Are new account documents prenumbered?
   a. Are they issued in strict numerical sequence?
   b. Are the opening of new accounts and access to unused new account records and certificate of deposit (CD) forms handled by an employee who is not a teller or who cannot make internal entries to customer accounts or general ledger?

*2. Does the institution have a written "know your customer" policy?
   a. Do new account applications require sufficient information to clearly identify the customer?
   b. Are "starter" checks issued only after verification of data on new transaction account applications?
   c. Are checkbooks and statements mailed only to the address of record? If not, is a satisfactory explanation and description obtained for any other mailing address (post office boxes, friend or relative, etc.)?
   d. Are employees responsible for opening new accounts trained to screen depositors for signs of check kiting?

*3. Does the bank perform periodic inventories of new account documents and CDs, and do the inventories include an accountability of numbers issued out of sequence or cancelled prior to issuance?

*4. Are CDs signed by a properly authorized individual?

5. Are new account applications and signature cards reviewed by an officer?

CLOSING DEPOSIT ACCOUNTS

6. Are signature cards for closed accounts promptly pulled from the active account file and placed in a closed file?

7. Are closed account lists prepared? If so, indicate the frequency _____.

8. Is the closed account list circulated to appropriate management?

9. Is verification of closed accounts, in the form of statements of "goodwill" letters, required? Are such letters mailed under the control of someone other than a teller or an individual who can make internal entries to an account (such as a private banker or branch manager)?

*10. For redeemed CDs:
   a. Are they stamped paid?
   b. Is disposition of proceeds documented to provide a permanent record as well as to provide a clear audit trail?
   c. Are penalty calculations on CDs and other time deposits redeemed prior to maturity rechecked by a second employee?

*11. Are matured CDs that are not automatically renewable classified as demand deposits on the call report and on the Report of Transaction Accounts, Other Deposits and Vault Cash (FR 2900)?

DEPOSIT ACCOUNT RECORDS

*12. Does the institution have documentation supporting a current reconcilement of each deposit account category recorded on its general ledger, including customer accounts and bank-controlled accounts such as dealer reserves, escrow, Treasury tax and loan, etc.? (Prepare separate workpapers

for demand and time accounts listing each account, date and frequency of reconcilement, general ledger balance, subsidiary ledger balance, adjustments, and unexplained differences.)

*13. Are reconciliations performed by an individual or group not directly engaged in accepting or preparing transactions or in data entry to customers' accounts?

*14. If the size of the institution precludes full separation of duties between data entry and reconcilement, are reconcilement duties rotated on a formal basis, and is a record maintained to support such action?

*15. Are reconciliations reviewed by appropriate independent management, especially under circumstances where full separation of duties is not evident?

*16. Are periodic reports prepared for management providing an aging of adjustments and differences and detailing the status of significant adjustments and differences?

*17. Has management adequately addressed any significant and/or long outstanding adjustments or differences?

*18. Are the preparation of input and posting of subsidiary demand deposit records performed and/or adequately reviewed by persons who do not also—
   a. accept or generate transactions?
   b. issue official checks and/or handle funds-transfer transactions?
   c. prepare or authorize internal entries (return items, reversals, and direct charges, such as loan payments)?
   d. prepare supporting documents required for disbursements from an account?
   e. perform maintenance on the accounts, such as change of address, stop payments, holds, etc.?

*19. Are in-process, suspense, interoffice, and other accounts related to deposit accounts controlled or closely monitored by persons who do not have posting or reconcilement duties?

*20. Are periodic reports prepared for management on open items in suspense, in-process, interoffice, and other deposit accounts, and do the reports include aging of items and the status of significant items?

21. If the bank's bookkeeping system is not automated, are deposit bookkeepers rotated?

22. Does the bank segregate the deposit account files of—
   a. employees and officers?
   b. directors?
   c. the business interests of, or controlled by, employees and officers?
   d. the business interests of, or controlled by, directors?

*23. Are posting and check filing separated from statement preparation?

24. Are statements mailed or delivered to all customers as required by the bank's deposit account agreement?

*25. Are customer transaction and interest statements mailed in a controlled environment that precludes any individual from receiving any statement not specifically authorized by the customer or the institution's policy (for example, dormant accounts)?

DORMANT ACCOUNTS AND RETURNED MAIL

*26. Does the institution have formal policies and procedures for the handling of customers' transaction and interest statements that are returned by the post office as undeliverable? Does the policy—
   a. require statements be periodically mailed on dormant accounts? If so, how often?
   b. prohibit the handling of such statements by (1) the branch of account, (2) account officer, and (3) other individuals with exclusive control of accounts?
   c. require positive action to follow up on obtaining new addresses?
   d. place statements and signature cards for accounts for which contact cannot be reestablished (the mail is returned more than once or marked ''deceased'') into a controlled environment?
   e. require the bank to change the address on future statements to the department of the bank (controlled environment) designated to receive returned mail?
   f. require a written request from the customer and verification of the customer's signature before releasing an account from the controlled environment?

*27. Are accounts for which contact cannot be reestablished and that do not reflect recent activity removed from active files and clearly classified as dormant?

*28. Before returning a dormant account to active status, are transactions reactivating the account verified, and are independent confirmations obtained directly from the customer?
*29. Does transfer from dormant to active status require approval of an officer who cannot approve transactions on dormant accounts?

INACTIVE ACCOUNTS

30. Are demand accounts that have been inactive for one year and time accounts that have been inactive for three years classified as inactive? If not, state the time period _____.
31. Does the bank periodically review the inactive accounts to determine if they should be placed in a dormant status, and are decisions to keep such accounts in active files documented?

HOLD MAIL

*32. Does the institution have a formal policy and procedure for handling statements and documents that a customer requests not to be mailed but will be picked up at a location within the institution? Does the policy—
    a. require that statements will not be held by an individual (an account officer, branch manager, bookkeeper, etc.) who could establish exclusive control over entries to, and delivery of, statements for customer accounts?
    b. discourage such arrangements and grant them only after the customer provides a satisfactory reason for the arrangement?
    c. require the customer to sign a statement describing the purpose of the request and the proposed times for pickup, and designate the individuals authorized to pick up the statement?
    d. require maintenance of signature cards for individuals authorized to pick up statements and compare the authorized signatures to those who sign for statements held for pickup?
    e. prohibit the delivery of statements to officers and employees requiring special attention unless it is part of the formal "hold mail" function?
*33. Is a central record maintained in a control area that does not originate entries to customers' accounts, identifying each "hold mail" arrangement, the designated location for pickup, and the scheduled pickup times? Does the control area—
    a. maintain current signature cards of individuals authorized to pick up statements?
    b. obtain signed receipts showing the date of pickup and compare the receipts to the signature cards?
    c. follow up on the status of statements not picked up as scheduled?
*34. Does management review activity in "hold mail" accounts that have not been picked up for extended periods of time (for example, one year), and, where there is no activity, place the accounts in a dormant status?

OVERDRAFTS

*35. Are officer overdraft authorization limits formally established?
*36. Does the bank require an authorized officer to approve overdrafts?
*37. Is an overdraft listing prepared daily for demand deposit and time transaction accounts?
38. For banks processing overdrafts that are not automatically approved ("pay none" system), is the nonsufficient funds report circulated among bank officers?
*39. Are overdraft listings circulated among the officers?
40. Are the statements of accounts with large overdrafts reviewed for irregularities?
41. Is a record of large overdrafts included in the monthly report to the board of directors or its committee and does it include the overdraft origination date?
42. Is there an established schedule of service charges?

UNCOLLECTED FUNDS

*43. Does the institution generate a daily report of drawings against uncollected funds for

demand deposits and time transaction accounts?
   a. Is the computation of uncollected funds positions based on reasonable check collection criteria?
   b. Can the reports, or a separate account activity report, reasonably be used to detect potential kiting conditions?
   c. If reports are not generated for time transaction accounts, is a system in place to control drawings against uncollected funds?

*44. Do authorized officers review the uncollected funds reports and approve drawings against uncollected funds within established limits?

*45. Are accounts that frequently appear on the uncollected funds and/or kite suspect reports reviewed regardless of account balances? (For example, accounts with simultaneous large debits and credits can reflect low balances.)

OTHER MATTERS

*46. Are account maintenance activities (change of address, status changes, rate changes, etc.) separated from data entry and reconciling duties?

*47. Do all internal entries other than service charges require the approval of appropriate supervisory personnel?

*48. If not included in the internal/external audit program, are employees' and officers' accounts, accounts of their business interests, and accounts controlled by them periodically reviewed for unusual or prohibited activity?

*49. For unidentified deposits:
   a. Are deposit slips kept under dual control?
   b. Is their disposition approved by an appropriate officer?

*50. For returned checks, unposted items, and other rejects:
   a. Are daily listings of such items prepared?
   b. Are all items reviewed daily and is disposition of items required within a reasonable time period? Indicate the time period _____.
   c. Are reports prepared for management showing items not disposed of within the established time frames?

51. Are customers immediately notified in writing of deposit errors?

52. Does the bank require a customer's signature for stop-payment orders?

53. For automatic transfer accounts:
   a. Are procedures in effect that require officer approval for transfers in excess of the savings balance?
   b. For nonautomated systems, are transfers made by employees who do not also handle cash, execute external funds transfers, issue official checks singly, or post subsidiary records?

54. For telephone transfer accounts:
   a. Do depositors receive an individual identification code for use in making transfers?
   b. Are transfers made by employees who do not also handle cash, execute external funds transfers, issue official checks singly, or post subsidiary records?

*55. If not included in the internal/external audit program, are accrual balances for the various types of deposits verified periodically by an authorized official? If so, how often _____?

*56. Are accounts with a "hold-balance" status—those accounts on which court orders have been placed, those pledged as security to customers' loans, those pending the clearing of a large check, those where the owner is deceased, and those where the passbook has been lost—"locked-out" for transactions unless approved by appropriate management?

57. For passbook accounts:
   a. Do all entries to passbooks contain teller identification?
   b. Under a window-posting system, are recording media and passbooks posted simultaneously?
   c. Are tellers prohibited from holding customers' savings passbooks?
   d. If customers' passbooks are held, are they maintained under the institutions "hold mail" program and kept under dual control?
   e. Are customers prohibited from withdrawing funds without a passbook? If not, state the policy.

58. For withdrawals from savings or other time accounts:
   a. Are withdrawal tickets cancelled daily?

b. Are procedures in place to preclude overdrafts?
c. Are procedures in effect to place and to check for holds on withdrawals over a stated amount? Indicate the amount _____.

59. For signature cards on demand and time accounts:
a. Are procedures in effect to guard against the substitution of false signatures? Describe the procedures.
b. Are signature cards stored to preclude physical damage?
c. Are signatures compared for withdrawals and cashed checks? Describe the procedures.

OFFICIAL CHECKS, MONEY ORDERS, AND CERTIFIED CHECKS

*60. Are separate general ledger accounts maintained for each type of official check?
*61. As to the types of checks issued:
a. Are multicopy checks and certified check forms used? If not, are detailed registers of disbursed checks maintained?
b. Are all checks prenumbered and issued in sequence?
c. Is check preparation and issuance separate from recordkeeping?
d. Is the signing of checks in advance prohibited?
e. Do procedures prohibit issuance of a check before the credit is processed?
*62. Is the list authorizing bank personnel to sign official checks kept current? Does the list include changes in authorization limits, delete employees who no longer work at the bank, and indicate employees added to the list?
*63. Are appropriate controls in effect over check signing machines (if used) and certification stamps?
*64. Are voided checks and certified check forms promptly defaced and filed with paid checks?
*65. If reconcilements are not part of the overall deposit reconciliation function—
a. are outstanding checks listed and reconciled regularly to the general ledger? If so, how often _____?
b. is permanent evidence of reconcilements maintained?
c. is there clear separation between preparation of checks, data entry, and reconcilement?
d. are the reconcilements reviewed regularly by an authorized officer?
e. are reconcilement duties rotated on a formal basis in institutions where size precludes full separation of duties between data entry and reconcilement?
f. are authorized signatures and endorsements checked by the filing clerk?
*66. For supplies of official checks:
a. Are records of unissued official checks maintained centrally and at each location storing them?
b. Are periodic inventories of unissued checks independently performed?
c. Do the inventories include a description of all checks issued out of sequence?
d. If users are assigned a supply, is that supply replenished on a consignment basis?
*67. Are procedures in effect to preclude certification of checks drawn against uncollected funds?

TREASURY TAX AND LOAN ACCOUNTS (TREASURY CIRCULAR 92)

68. Do transfers from the remittance option account to the Federal Reserve Bank occur the next business day after deposit?
69. Is the remittance option included in the computation of reserve requirements?
70. When the note option is used, do transfers from the Treasury tax and loan (TT&L) demand deposit account occur the next business day after deposit?
*71. Has the TT&L account reconcilement been completed in a timely manner and approved by a supervisor?
72. Has adequate collateral been pledged to secure the TT&L account?

AUDIT

*73. Are deposit account activities audited on a sufficiently frequent basis?
*74. Does the scope of the audit program

require, and do audit records support, substantive testing or quantitative measurements of deposit account activities that, at a minimum, include the matters set forth in this questionnaire?

*75. Does the audit program include a comprehensive confirmation program with customers of each deposit category maintained by the institution?

*76. Do audit department records support the execution of the confirmation program, and do the records reflect satisfactory follow-up of responses and of requests returned as undeliverable?

*77. Are audit and prior examination recommendations for deposit account activities appropriately addressed?

CONCLUSION

*78. Does the foregoing information provide an adequate basis for evaluating internal control in that deficiencies in areas not covered by this questionnaire do not significantly impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.

*79. Are internal controls adequate based on a composite evaluation, as evidenced by answers to the foregoing questions?

INTRODUCTION

Borrowed funds are a common and practical method for banks of all sizes to meet customers' needs and enhance banking operations. For the purposes of this section, borrowings exclude long-term subordinated debt such as capital notes and debentures (discussed in "Assessment of Capital Adequacy," section 3020.1). Borrowings may exist in a number of forms, both on a direct and indirect basis. Common sources of direct bank borrowings include Federal Home Loan Bank credit lines, federal funds purchased, loans from correspondent banks, repurchase agreements, negotiable certificates of deposit, and Federal Reserve discount-window borrowings. These are discussed in some detail below. Other borrowings include bills payable to the Federal Reserve, interest-bearing demand notes issued to the U.S. Treasury (the Treasury tax and loan note option account), mortgages payable, due bills, and other types of borrowed securities. Indirect forms of borrowings include customer paper rediscounted and assets sold with the bank's endorsement or guarantee, or subject to a repurchase agreement.

The primary reasons a bank may borrow include the following:

- To meet the temporary or seasonal loan or deposit withdrawal needs of its customers, if the borrowing period is temporary and the bank is quickly restored to a position in which the quantity of its principal earning assets and cash reserves is in proper relation to the requirements of its normal deposit volume.
- To meet large and unanticipated deposit withdrawals that may arise during periods of economic distress. The examiner should distinguish between "large and unanticipated deposit withdrawals" and a predeterminable contraction of deposits, such as the cessation of activities in a resort community or the withdrawal of funds on which the bank received adequate prior withdrawal notice. Those situations should be met through ample cash reserves and readily convertible assets rather than borrowing.
- To effectively manage liabilities. Generally, the effective use of this type of continuous borrowing is limited to money-center or large regional banks.

It is important to analyze each borrowing on its own merit to determine its purpose, effectiveness, and stability. Some of the more frequently used sources of borrowings are discussed below.

COMMON SOURCES OF BORROWINGS

Federal Home Loan Bank Borrowings

The Federal Home Loan Bank (FHLB) originally served solely as a source of borrowings to savings and loan companies. With the implementation of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), FHLB's lending capacity was expanded to include banks.

Compared with borrowings from the discount window of the Reserve Banks, borrowings from the FHLB have fewer conditions. Both short-term and long-term borrowings, with maturities ranging from overnight to 30 years, are available to institutions at generally competitive interest rates. The flexibility of the facility enables bank management to use this source of funds for the purpose of asset/liability management, and it allows management to secure a favorable interest-rate spread. For example, FHLB borrowings may provide a lower-cost alternative to the conventional deposit, particularly in a highly competitive local market.

Management should be capable of explaining the purpose of the borrowing transaction. The borrowing transaction should then be analyzed to determine whether the arrangement achieved the stated purpose or whether the borrowings are a sign of liquidity deficiencies. Further, the borrowing agreement between the institution and the FHLB should be reviewed to determine the asset collateralizing the borrowings and the potential risks presented by the agreement. In some instances, the borrowing agreement may provide for collateralization by all assets not already pledged for other purposes.

The types of collateral necessary to obtain an FHLB loan are residential mortgage loans and mortgage-backed securities. The composite rating of an institution is a factor in both the approval for obtaining an FHLB loan and the level of collateral required.

Federal Funds Purchased

The day-to-day use of federal funds is a rather common occurrence, and federal funds are considered an important money market instrument. Many regional and money-center banks, acting in the capacity of correspondents to smaller community banks, function as both providers and purchasers of federal funds and, in the process, often generate a small return.

A brief review of bank reserves is essential to a discussion of the federal-funds market. As a condition of membership in the Federal Reserve System, member banks are required to maintain a portion of their deposits as reserves. Reserves can take the form of vault cash and deposits in the Reserve Bank. The amount of these reserves is not determined daily, but is computed on the basis of the average level of deposits within the ''reserve period'' ending each Wednesday.

Since member banks do not receive interest on these reserves, banks prefer to keep excess balances at a minimum to achieve the maximum utilization of funds. To accomplish this goal, banks carefully analyze and forecast their daily reserve position. Changes in the volume of required reserves occur frequently as the result of deposit fluctuations. Deposit increases require member banks to maintain more reserves; conversely, deposit decreases require less reserves.

The most frequent type of federal-funds transaction is unsecured, for one day, and repayable the following business day. The rate is usually determined by overall money market rates, as well as by the available supply of and demand for funds. In some instances, when the selling and buying relationship between two banks is quite continuous, something similar to a line of credit may be established on a funds-availability basis. Although the most common federal-funds transaction is unsecured, the selling of funds can also be secured and for longer periods of time. Agency-based federal-funds transactions are discussed in ''Bank Dealer Activities,'' section 2030.1.

Loans from Correspondent Banks

Small and medium-sized banks often negotiate loans from their principal correspondent banks. The loans are usually for short periods and may be secured or unsecured.

Repurchase Agreements

The terms ''repurchase agreement[1]'' (repo) and ''reverse repurchase agreement'' refer to a type of transaction in which a money market participant acquires immediately available funds by selling securities and simultaneously agreeing to repurchase the securities after a specified time at a given price, which typically includes interest at an agreed-on rate. Such a transaction is called a repo when viewed from the perspective of the supplier of the securities (the borrower), and a reverse repo or matched sale/purchase agreement when described from the point of view of the supplier of funds (the lender).

Frequently, instead of resorting to direct borrowings, a bank may sell assets to another bank or some other party and simultaneously agree to repurchase the assets at a specified time or after certain conditions have been met. Bank securities as well as loans are often sold under repurchase agreements to generate temporary working funds. These kind of agreements are often used because the rate on this type of borrowing is less than the rate on unsecured borrowings, such as federal funds purchased.

The usual terms for sale of securities under a repurchase agreement require that, after a stated period of time, the seller repurchase the securities at a predetermined price or yield. A repo commonly includes a near-term maturity (overnight or a few days) and is usually arranged in large-dollar amounts. The lender or buyer is entitled to receive compensation for use of the funds provided to its counterparty. The interest rate paid on a repo is negotiated based on the rates on the underlying securities. U.S. government and agency securities are the most common type of instruments sold under repurchase agreements, since they are exempt from reserve requirements.

Although standard overnight and term repo arrangements in Treasury and federally related agency securities are most prevalent, market participants sometimes alter various contract provisions to accommodate specific investment needs or to provide flexibility in the designation of collateral. For example, some repo contracts allow substitutions of the securities subject to the repurchase commitment. These are called

1. Further discussion of repurchase agreements can be found in the Board's November 1995 policy statement, ''Repurchase Agreements Between Depository Institutions and Securities Dealers and Others.''

''dollar repurchase agreements'' (dollar rolls), and the initial seller's obligation is to repurchase securities that are substantially similar, but not identical, to the securities originally sold. Another common repo arrangement is called a ''flex repo,'' which, as implied by the name, provides a flexible term to maturity. A flex repo is a term agreement between a dealer and a major customer in which the customer buys securities from the dealer and may sell some of them back before the final maturity date.

Bank management should be aware of certain considerations and potential risks of repurchase agreements, especially when entering into large-dollar-volume transactions with institutional investors or brokers. Both parties in a term repo arrangement are exposed to interest-rate risk. It is a fairly common practice to have the collateral value of the underlying securities adjusted daily to reflect changes in market prices and to maintain the agreed-on margin. Accordingly, if the market value of the repo securities declines appreciably, the borrower may be asked to provide additional collateral. Conversely, if the market value of the securities rises substantially, the lender may be required to return the excess collateral to the borrower. If the value of the underlying securities exceeds the price at which the repurchase agreement was sold, the bank could be exposed to the risk of loss if the buyer is unable to perform and return the securities. This risk would obviously increase if the securities are physically transferred to the institution or broker with which the bank has entered into the repurchase agreement. Moreover, if the securities are not returned, the bank could be exposed to the possibility of a significant write-off, to the extent that the book value of the securities exceeds the price at which the securities were originally sold under the repurchase agreement. For this reason, banks should avoid pledging excessive collateral and obtain sufficient financial information on and analyze the financial condition of those institutions and brokers with whom they engage in repurchase transactions.

''Retail repurchase agreements'' (retail repos)[2] for a time were a popular vehicle for some commercial banks to raise short-term funds and compete with certain instruments offered by nonbanking competitors. For booking purposes, a retail repo is a debt incurred by the issuing bank that is collateralized by an interest in a security that is either a direct obligation of or guaranteed as to principal and interest by the U.S. government or an agency thereof. Retail repos are issued in amounts not exceeding $100,000 for periods of less than 90 days. With the advent of money market certificates issued by commercial banks, the popularity of the retail repo declined.

Both retail and large-denomination, wholesale repurchase agreements are in many respects equivalent to short-term borrowings at market rates of interest. Therefore, banks engaging in repurchase agreements should carefully evaluate their interest-rate-risk exposure at various maturity levels, formulate policy objectives in light of the institution's entire asset and liability mix, and adopt procedures to control mismatches between assets and liabilities. The degree to which a bank borrows through repurchase agreements also should be analyzed with respect to its liquidity needs, and contingency plans should provide for alternate sources of funds.

Negotiable Certificates of Deposit

Certificates of deposit (CDs) have not been legally defined as borrowings and continue to be reflected as deposits for reporting purposes. However, the fundamental distinction between a negotiable money market CD as a deposit or as a borrowing is nebulous at best; in fact, the negotiable money market CD is widely recognized as the primary borrowing vehicle for many banks. Dependence on CDs as sources of funds is discussed in ''Deposit Accounts,'' section 3000.1.

Federal Reserve Discount-Window Borrowings

Federal Reserve credit, commonly referred to as borrowing from the "discount window," is governed by the provisions of Regulation A and is available to any depository institution that maintains reservable transaction accounts or nonpersonal time deposits. The January 2, 1998, Operating Circular No. 10 establishes the terms for discount-window borrowing at all Federal Reserve offices. The availability of Federal

2. Further discussion of retail repurchase agreements can be found in SR-82-25 (''Retail Repurchase Agreement (Retail Repo) Examination Guidelines,'' April 16, 1982).

Reserve credit is an important dimension of general monetary policy and is a source of funding when other sources are not reasonably available. Discount-window borrowings provide short-term funds, generally in the form of adjustment credit, to help eligible institutions meet temporary requirements for funds or to cushion more persistent outflows of funds while the institution makes an orderly adjustment of its balance sheet. For example, an institution may seek adjustment credit to meet an unexpected loss of deposits or a surge of credit demands; to avoid an overnight overdraft; or to meet liquidity needs due to forces beyond the immediate control of an institution, such as an internal operating problem or a natural disaster. Adjustment credit generally is available after alternative sources of credit (including special industry lenders) have been fully used or are not reasonably available. Seasonal credit may be provided to help smaller depository institutions meet regular longer-term needs for funds arising from a combination of expected or seasonal patterns of movement in deposits and loans. A third type of borrowing, extended credit, is provided less regularly to depository institutions when there are exceptional circumstances or practices involving a particular institution, or to institutions experiencing difficulty adjusting to changing money market conditions over a longer period. As with adjustment credit, extended credit is available when similar assistance is not reasonably available from other sources.

To obtain funds from the discount window, the borrowing purpose must be sound. The appropriateness of borrowing for short-term purposes is related to the circumstances confronting the institution. While short-term adjustment credit can accommodate a broad range of funding needs, there are various inappropriate reasons for borrowing, including arbitrage and the substitution of Federal Reserve credit for other reasonably available market sources of funds. More specifically, borrowing would be inappropriate in the following situations: to take advantage of a differential between the discount rate and the rate for alternative sources of funds, to substitute Federal Reserve credit for short-term interest-sensitive funds normally acquired as part of the institution's liability structure, or to substitute Federal Reserve credit for capital. Additionally, it would be inappropriate to use discount-window credit to expand loans, roll over maturing securities which are not needed for pledging purposes, or increase or restructure the institution's investment portfolio (unless shifts in the investment portfolio are related to short-term local municipal funding needs). Finally, Federal Reserve credit should not be sought to fund operations of the parent holding company or any other affiliates.

All loans advanced by the Reserve Bank must be secured to the satisfaction of the Reserve Bank. Satisfactory collateral generally includes U.S. government and federal-agency securities, and if they are of acceptable quality, mortgage notes covering one- to four-family residences; state and local government securities; and business, consumer, and other customer notes. Traditionally, collateral is held in the Reserve Bank vault. However, under certain circumstances, collateral may be retained on the borrower's premises under a borrower-in-custody arrangement, or it may be held on the borrower's premises under the Reserve Bank's exclusive custody and control in a field warehouse arrangement. Collateral may also be held at the borrowing institution's correspondent or another third party. All book-entry collateral must be held at the Federal Reserve Bank. Definitive collateral, not in bearer form, must be properly assigned or endorsed.

The Reserve Bank does not discourage financial institutions from coming to the discount window for credit if they have a legitimate need. However, if an institution begins borrowing adjustment credit on a regular basis, Reserve Bank officials will usually review the purpose of the borrowings and encourage the institution to initiate a program to eliminate the need for such borrowings. In any event, borrowing from the discount window does not typically indicate financial weakness and, as such, needs to be analyzed on a case-by-case basis. Reserve Banks are limited in their lending discretion to institutions that are less than adequately capitalized or assigned a composite "5" CAMELS rating.

INTERNATIONAL BORROWINGS

International borrowings may be direct or indirect. Common forms of direct international borrowings include loans and short-term call money from foreign banks, borrowings from the Export-Import Bank of the United States, and overdrawn nostro (due from foreign banks—demand) accounts. Indirect forms of borrowing include notes and trade bills rediscounted with the

central banks of various countries; notes, acceptances, import drafts, or trade bills sold with the bank's endorsement or guarantee; notes and other obligations sold subject to repurchase agreements; and acceptance pool participations.

ANALYZING BORROWINGS

If a bank borrows extensively or in large amounts, the examiner should thoroughly analyze the borrowing activity. An effective analysis includes a review of the bank's reserve records, both required and maintained, to determine the frequency of deficiencies at the closing of reserve periods. The principal sources of borrowings, range of amounts, frequency, length of time indebted, cost, and reasons for the borrowings should be explored. The actual use of the funds should be verified.

Examiners should also analyze changes in a bank's borrowing position for signs of deterioration in its borrowing ability and overall creditworthiness. One indication of deterioration is the payment of large fees to money brokers to obtain funds because the bank is having difficulty obtaining access to conventional sources of borrowings. These ''brokered deposits'' are usually associated with small banks since they do not generally have ready access to alternate sources of funds available to larger institutions through the money and capital markets. Brokered deposits generally carry higher interest rates than alternate sources, and they tend to be particularly susceptible to interest-rate changes in the overall financial market. For further discussion of brokered deposits, refer to ''Deposit Accounts,'' section 3000.1.

Other indicators of deterioration in a bank's borrowing ability and overall creditworthiness include, but are not limited to, requests for collateral on previously unsecured credit lines or increases in collateral margins, the payment of above-market interest rates, or a shortening of maturities that is inconsistent with management's articulated balance-sheet strategies.

If the examiner finds that a bank's borrowing position is not properly managed, appropriate comments should be included in the report of examination.

Borrowed Funds
Examination Objectives
Effective date May 1996

Section 3010.2

1. To determine if the policies, practices, procedures, and internal controls for borrowed funds are adequate.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To determine the scope and adequacy of the audit function.
4. To determine compliance with laws and regulations.
5. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the Borrowed Funds section of the Internal Control Questionnaire.
2. Based on the evaluation of internal controls and the work performed by the internal/external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures. Also obtain a listing of any audit deficiencies noted in the latest review done by internal/external auditors from the examiner assigned to ''Internal Control'' and determine if appropriate corrections have been made.
4. Obtain the listing of accounts related to domestic and international borrowed funds from the examiner assigned to ''Examination Strategy.''
5. Prepare or obtain a listing of borrowings, by type, and—
   a. agree or reconcile balances to department controls and general ledger, and
   b. review reconciling items for reasonableness.
6. From consultation with the examiners assigned to the various loan areas, determine that the following schedules were reviewed in the lending departments and that there was no endorsement, guarantee, or repurchase agreement which would constitute a borrowing:
   a. participations sold
   b. loans sold in full since the preceding examination
7. Based on the information obtained in steps 5 and and 6, and through observation and discussion with management and other examining personnel, determine that all borrowings are properly reflected on the books of the bank.
8. If the bank engages in any form of borrowing which requires written borrowing agreement(s), complete the following:
   a. Prepare or update a carry-forward workpaper describing the major terms of each borrowing agreement, and determine that the bank is complying with those terms.
   b. Review terms of past and present borrowing agreements for indications of deteriorating credit position by noting—
      • recent substantive changes in borrowing agreements,
      • increases in collateral to support borrowing transactions,
      • general shortening of maturities,
      • interest rates exceeding prevailing market rates,
      • frequent changes in lenders, and
      • large fees paid to money brokers.
   c. If the bank has obtained funds from money brokers (brokered deposits), determine—
      • why such deposits were originally obtained,
      • who the deposits were obtained from,
      • what the funds are used for,
      • the relative cost of brokered deposits in comparison to alternate sources of funds, and
      • the overall effect of the use of brokered deposits on the bank's condition and whether there appear to be any abuses related to the use of such deposits.
   d. If there is an indication that the bank's credit position has deteriorated, ascertain why.
9. If the bank engages in the issuance of retail repurchase agreements (retail repos), check for compliance with the disclosure requirements in the Federal Reserve Board's Policy Statement on the Issuance of Repurchase Agreements, S-2457, April 13, 1982 (*Federal Reserve Regulatory Service* 3–1579).
10. Determine the purpose of each type of borrowing and conclude whether the bank's borrowing posture is justified in light of its financial condition and other relevant circumstances.
11. Provide the examiner assigned to ''Asset/Liability Management'' the following information:
    a. A summary and an evaluation of the bank's borrowing policies, practices, and procedures. The evaluation should give consideration to whether the bank—
       • evaluates interest-rate-risk exposure at various maturity levels;

- formulates policy objectives in light of the entire asset and liability mix, and liquidity needs;
- has adopted procedures to control mismatches between assets and liabilities; and
- has contingency plans for alternate sources of funds in the event of a run-off of current funding sources.

b. An evaluation of the bank's adherence to established policies and procedures.
c. A repricing maturity schedule of borrowings.
d. A listing of prearranged federal funds lines and other lines of credit. Indicate the amount currently available under those lines, i.e., the unused portion of the lines.
e. The amount of any anticipated decline in borrowings over the next _____ day period. (The time period will be determined by the examiner assigned to "Asset/Liability Management.")

12. Prepare a list of all borrowings by category, on a daily basis for the period since the last examination. Also, include on the list short-term or overnight money market lending activities such as federal funds sold and securities purchased under resale agreement. For each category on the list, compute for the period between examinations—
    a. high point
    b. low point
    c. average amounts outstanding
    d. frequency of borrowing and lending activity, expressed in terms of number of days
13. Prepare, in appropriate report form, and discuss with appropriate management—
    a. the adequacy of written policies regarding borrowings;
    b. the manner in which bank officers are operating in conformance with established policy;
    c. the existence of any unjustified borrowing practices;
    d. any violation of laws or regulations; and
    e. recommended corrective action when policies, practices, or procedures are deficient; violations of laws or regulations exist; or when unjustified borrowing practices are being pursued.
14. Update the workpapers with any information that will facilitate future examinations.
15. Review the market value of collateral and collateral-control arrangements for repurchase agreements to ensure that excessive collateral has not been pledged and that the bank is not exposed to excessive credit risks.

Review the bank's controls, policies, practices and procedures for obtaining and servicing borrowed funds. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

POLICY

1. Has the board of directors approved a written policy which:
   a. Outlines the objectives of bank borrowings?
   b. Describes the bank's borrowing philosophy relative to risk considerations, i.e., leverage/growth, liquidity/income?
   c. Provides for risk diversification in terms of staggered maturities rather than solely on cost?
   d. Limits borrowings by amount outstanding, specific type or total interest expense?
   e. Limits or restricts execution of borrowings by bank officers?
   f. Provides a system of reporting requirements to monitor borrowing activity?
   g. Requires subsequent approval of transactions?
   h. Provides for review and revision of established policy at least annually?

RECORDS

*2. Does the bank maintain subsidiary records for each type of borrowing, including proper identification of the obligee?
*3. Is the preparation, addition and posting of the subsidiary borrowed funds records performed or adequately reviewed by persons who do not also:
   a. Handle cash?
   b. Issue official checks and drafts?
   c. Prepare all supporting documents required for payment of debt?
*4. Are subsidiary borrowed funds records reconciled with the general ledger accounts at an interval consistent with borrowing activity, and are the reconciling items investigated by persons, who do not also:
   a. Handle cash?
   b. Prepare or post to the subsidiary borrowed funds records?

INTEREST

*5. Are individual interest computations checked by persons who do not have access to cash?
6. Is an overall test of the total interest paid made by persons who do not have access to cash?
7. Are payees on the checks matched to related records of debt, note or debenture owners?
8. Are corporate resolutions properly prepared as required by creditors and are copies on file for reviewing personnel?
9. Are monthly reports furnished to the board of directors reflecting the activity of borrowed funds, including amounts outstanding, interest rates, interest paid to date and anticipated future activity?

CONCLUSION

10. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
11. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

INTRODUCTION

Although both bank directors and bank regulators must look carefully at the quality of bank assets and management and at the ability of the bank to control costs, evaluate risks, and maintain proper liquidity, capital adequacy is the area that triggers the most regulatory action, especially in view of prompt corrective action. The primary function of capital is to support the bank's operations, act as a cushion to absorb unanticipated losses and declines in asset values that could otherwise cause a bank to fail, and provide protection to uninsured depositors and debt holders in the event of liquidation. A bank's solvency promotes public confidence in the bank and the banking system as a whole by providing continued assurance that the bank will continue to honor its obligations and provide banking services. By exposing stockholders to a larger percentage of any potential loss, higher capital levels also reduce the subsidy provided to banks by the federal safety net. Capital regulation is particularly important because deposit insurance and other elements of the federal safety net provide banks with an incentive to increase their leverage beyond what the market—in the absence of depositor protection—would permit. Additionally, higher capital levels can reduce the need for regulatory supervision, lowering costs to the banking industry and the government.

The Federal Reserve uses two ratios to help assess the capital adequacy of state members: the risk-based capital ratio and the tier 1 leverage ratio. State member banks may also be subject to separate capital requirements imposed by state banking supervisors.

OVERVIEW OF THE RISK-BASED CAPITAL MEASURE FOR STATE MEMBER BANKS

The Federal Reserve's risk-based capital guidelines (the guidelines) focus principally on the credit risk associated with the nature of banks' on- and off-balance-sheet exposures and on the type and quality of banks' capital. The information provided in this section should be used in conjunction with the guidelines, which are found in Regulation H (12 CFR 208), appendix A.

The risk-based capital guidelines provide a definition of capital and a framework for calculating risk-weighted assets by assigning assets and off-balance-sheet items to broad categories of credit risk. A bank's risk-based capital ratio is calculated by dividing its qualifying capital (the numerator of the ratio) by its risk-weighted assets (the denominator). The definition of qualifying capital is outlined below, as are the procedures for calculating risk-weighted assets.

The major objectives of the risk-based capital guidelines are to make regulatory capital requirements more sensitive to differences in credit-risk profiles among banking organizations; to factor off-balance-sheet exposures into the assessment of capital adequacy; to minimize disincentives to holding liquid, low-risk assets; and to achieve greater consistency in the evaluation of the capital adequacy of major banking organizations worldwide.

The guidelines set forth minimum supervisory capital standards that apply to all state member banks on a consolidated basis. Most banks are expected to operate with capital levels above the minimum ratios. Banking organizations that are undertaking significant expansion or that are exposed to high or unusual levels of risk are expected to maintain capital well above the minimum ratios; in such cases, the Federal Reserve may specify a higher minimum requirement. In addition, the risk-based capital ratio is used as a basis for categorizing institutions for purposes of prompt corrective action.[1]

For most institutions, the risk-based capital ratio focuses principally on broad categories of credit risk, although the framework for assigning assets and off-balance-sheet items to risk categories does incorporate elements of transfer risk, as well as limited instances of interest-rate and market risk.[2] The framework incorporates risks arising from traditional banking activities as well as risks arising from nontraditional activities. The ratio does not, however, incorporate other factors that can affect an institution's financial condition. These factors include overall interest-rate exposure; liquidity, funding,

1. See section 4133.1, "Prompt Corrective Action."
2. A small number of institutions is required to hold capital to support their exposure to market risk. For more information, see the "Market-Risk Measure" subsection below or the Federal Reserve's *Trading and Capital-Markets Activities Manual*, section 2110.1, "Capital Adequacy."

and market risks; the quality and level of earnings; investment, loan portfolio, and other concentrations of credit; certain risks arising from nontraditional activities; the effectiveness of loan and investment policies; and management's overall ability to monitor and control financial and operating risks, including the risks presented by concentrations of credit and nontraditional activities. An overall assessment of capital adequacy must take into account these other factors, including, in particular, the level and severity of problem and classified assets as well as a bank's exposure to declines in the economic value of its capital due to changes in interest rates. For this reason, the final supervisory judgment on a bank's capital adequacy may differ significantly from conclusions that might be drawn solely from the level of its risk-based capital ratio.

DEFINITION OF CAPITAL

For the purpose of risk-based capital, a bank's total capital consists of two major components: ''core capital elements'' (which are included in tier 1 capital), and ''supplementary capital elements'' (which are included in tier 2 capital). To qualify as an element of tier 1 or tier 2 capital, a capital instrument must be unsecured and may not contain or be covered by any covenants, terms, or restrictions that are inconsistent with safe and sound banking practices.

Tier 1 capital is generally defined as the sum of core capital elements (common equity, including capital stock, surplus, and undivided profits; qualifying noncumulative perpetual preferred stock; and minority interest in the equity accounts of consolidated subsidiaries) less goodwill, unrealized holding losses in the available-for-sale equity portfolio, and other intangible assets that do not qualify within capital, as well as any investments in subsidiaries that the Federal Reserve determines should be deducted from tier 1 capital. Tier 1 capital elements represent the highest form of capital, namely, permanent equity.

Tier 2 capital consists of a limited amount of the allowance for loan and lease losses, perpetual preferred stock that does not qualify for inclusion in tier 1 capital, mandatory convertible securities and other hybrid capital instruments, long-term preferred stock with an original term of 20 years or more, and limited amounts of term subordinated debt, intermediate-term preferred stock, and unrealized holding gains on qualifying equity securities.

Capital investments in unconsolidated banking and finance subsidiaries and reciprocal holdings of other banking organizations' capital instruments are deducted from a bank's capital. The sum of tier 1 and tier 2 capital less any deductions makes up total capital, which is the numerator of the risk-based capital ratio.

RISK WEIGHTING OF ON- AND OFF-BALANCE-SHEET ITEMS

Each asset and off-balance-sheet item (referred to collectively as claims) is assigned to one of four broad risk categories based on the perceived credit risk of the obligor or, if relevant, the guarantor or type of collateral. These risk categories are assigned weights of 0 percent, 20 percent, 50 percent, and 100 percent. The standard risk category is 100 percent: The majority of items fall into this category. The appropriate dollar value of the amount in each category is multiplied by the risk weight associated with that category. The resulting weighted values for each of the risk categories are added together. The resulting sum is the bank's total risk-weighted assets and is the denominator of the risk-based capital ratio.

Off-balance-sheet items are incorporated into the risk-based capital ratio through a two-step process. First, an on-balance-sheet ''credit-equivalent amount'' is calculated generally by multiplying the face amount of the item by a credit-conversion factor. Most off-balance-sheet items are assigned to one of the four credit-conversion factors, 0 percent, 20 percent, 50 percent, and 100 percent, which are intended to reflect the risk characteristics of the activity in terms of an on-balance-sheet equivalent. Once the credit-equivalent amount of the off-balance-sheet item is calculated, that amount generally is then categorized in the same manner as on-balance-sheet items, that is, by credit risk.

For derivative contracts, the credit-equivalent amount for each contract is determined by multiplying the notional principal amount of the underlying contract by a credit-conversion factor and adding the resulting product (which is an estimate of potential future exposure) to the positive mark-to-market value of the contract (which is the current exposure). A contract with a negative mark-to-market value is treated as

having a current exposure of zero. Where appropriate, a bank may offset positive and negative mark-to-market values of derivative contracts entered into with a single counterparty subject to a qualifying, legally enforceable, bilateral netting arrangement.

As a general rule, if the terms of a claim can change, the claim should be assigned to the risk category appropriate to the highest risk option available under the terms of the claim. For example, in the instance of a collateralized loan where the borrower has the option to withdraw the collateral before the loan is due, the loan would be treated as an uncollateralized claim for risk-based capital purposes. Similarly, a commitment that can be drawn down in the form of a loan or a standby letter of credit would be treated as a commitment to make a standby letter of credit, the higher risk option available under the terms of the commitment.

When an item may be assigned to more than one category, that item generally is assigned to the lowest eligible risk category. For example, a mortgage originated by the bank for which a 100 percent Federal Housing Administration guarantee has been obtained would be assigned the 20 percent risk weight appropriate to claims conditionally guaranteed by a U.S. government agency, rather than the 100 percent risk weight appropriate to high loan-to-value single-family mortgages.

While the primary determinant of the risk category of a particular on-balance-sheet asset or off-balance-sheet credit-equivalent amount is the obligor, collateral or guarantees may be used to a limited extent to assign an item to a lower risk category than would be available to the obligor.

The only forms of collateral that are recognized for risk-based capital purposes are cash on deposit in the lending bank;[3] securities issued or guaranteed by the central governments of the OECD-based group of countries,[4] U.S. government agencies, or U.S. government–sponsored agencies; and securities issued by multilateral lending institutions or regional development banks in which the U.S. government is a shareholder or contributing member. In order for a claim to be considered collateralized for risk-based capital purposes, the underlying arrangements must provide that the claim will be secured by recognized collateral throughout its term. A commitment may be considered collateralized for risk-based capital purposes to the extent that its terms provide that advances made under the commitment will be secured throughout their term.

The extent to which qualifying securities are recognized as collateral is determined by their current market value. The full amount of a claim for which a positive margin (that is, greater than 100 percent of the claim) of recognized collateral is maintained daily may qualify for a 0 percent risk weight. The full amount of a claim that is 100 percent secured by recognized collateral may be assigned to the 20 percent risk category. For partially secured obligations, the secured portion is assigned a 20 percent risk weight. Any unsecured portion is assigned the risk weight appropriate for the obligor or guarantor, if any. The extent to which an off-balance-sheet item is secured by collateral is determined by the degree to which the collateral covers the face amount of the item before it is converted to a credit-equivalent amount and assigned to a risk category. For derivative contracts, this determination is made in relation to the credit-equivalent amount.

The only guarantees that are recognized for risk-based capital purposes are those provided by central or state and local governments of the OECD-based group of countries, U.S. government agencies, U.S. government–sponsored agencies, multilateral lending institutions or regional development banks in which the U.S. is a shareholder or contributing member, U.S.

3. There is a limited exception to the rule that cash must be on deposit in the lending bank to be recognized as collateral. A bank participating in a syndicated credit secured by cash on deposit in the lead bank may treat its pro rata share of the credit as collateralized, provided that it has a perfected interest in its pro rata share of the collateral.

4. The OECD-based group of countries comprises all full members of the Organization for Economic Cooperation and Development (OECD), as well as countries that have concluded special lending arrangements with the International Monetary Fund (IMF) associated with the Fund's General Arrangements to Borrow. As of September 1998, the OECD countries were Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Saudi Arabia has concluded special lending arrangements with the IMF associated with the Fund's General Arrangements to Borrow. Any country that has rescheduled its external sovereign debt within the previous five years is not considered to be part of the OECD-based group of countries for risk-based capital purposes. In April 1994, Poland rescheduled its external sovereign debt.

depository institutions, and foreign banks. If an obligation is partially guaranteed, the portion that is not fully covered is assigned the risk weight appropriate to the obligor or to any collateral. An obligation that is covered by two types of guarantees having different risk weights is apportioned between the two risk categories appropriate to the guarantors.

IMPLEMENTATION

Banks are expected to meet a minimum ratio of capital to risk-weighted assets of 8 percent, with at least 4 percent taking the form of tier 1 capital. Banks that do not meet the minimum risk-based capital ratios, or that are considered to lack sufficient capital to support their activities, are expected to develop and implement capital plans acceptable to the Federal Reserve for achieving adequate levels of capital.[5] Such plans should satisfy the provisions of the guidelines or established arrangements that the Federal Reserve has agreed upon with designated banks. In addition, such banks should avoid any actions, including increased risk-taking or unwarranted expansion, that would lower or further erode their capital positions. In these cases, examiners are to review and comment on banks' capital plans and their progress in meeting minimum risk-based capital requirements.

It is appropriate to include comments on risk-based capital in the open section of the examination report when assessing the bank's capital adequacy. The bank should be encouraged to establish capital levels and ratios that are consistent with its overall financial profile. Examiner comments should address the adequacy of the bank's plans and progress toward meeting the relevant target ratios.

MARKET-RISK MEASURE

In August 1996, the Federal Reserve amended its risk-based capital framework to incorporate a measure for market risk. The market-risk amendment, also known as the market-risk rule, is found in Regulation H (12 CFR 208), appendix E. Under the market-risk rule, certain institutions with significant exposure to market risk must measure that risk using their internal value-at-risk (VAR) measurement model and, subject to parameters in the market-risk rule, hold sufficient levels of capital to cover the exposure. The market-risk rule applies to any insured state member bank whose trading activity (the gross sum of its trading assets and liabilities) equals (1) 10 percent or more of its total assets or (2) $1 billion or more. On a case-by-case basis, the Federal Reserve may require an institution that does not meet these criteria to comply with the market-risk rule if the Federal Reserve deems it necessary for safety-and-soundness reasons, or the Federal Reserve may exclude an institution that meets the criteria if the Federal Reserve deems such exclusion to be consistent with safe and sound banking practices.

The market-risk amendment is a supplement to the risk-based capital rules for credit risk; an institution applying the market-risk rule remains subject to the requirements of the credit-risk rules, but must adjust its risk-based capital ratio to reflect market risk. A bank that is applying the market-risk rule must hold capital to support its exposure to two types of risk: (1) general market risk arising from broad fluctuations in interest rates, equity prices, foreign-exchange rates, and commodity prices, including risk associated with all derivative positions; and (2) specific risk arising from changes in the market value of debt and equity positions in the trading account due to factors other than broad market movements, including the credit risk of an instrument's issuer. A bank's covered positions include all trading-account positions, as well as all foreign-exchange and commodity positions, whether or not they are in the trading account. For a detailed description of the market-risk measure, see the Federal Reserve's *Trading and Capital-Markets Activities Manual*, section 2110.1, "Capital Adequacy."

DOCUMENTATION

Banks are expected to have adequate systems in place to compute their risk-based capital ratios. Such systems should be sufficient to document the composition of the ratios for

5. Under the prompt-corrective-action framework, banks that do not meet the minimum risk-based capital ratio are considered undercapitalized and must file capital-restoration plans that meet certain requirements.

regulatory reporting and other supervisory purposes. Generally, supporting documentation will be expected to establish how banks track and report their capital components and on- and off-balance-sheet items that are assigned preferential risk weights, that is, risk weights less than 100 percent. Where a bank has inadequate documentation to support its assignment of a preferential risk weight to a given item, it may be necessary for examiners to assign an appropriate higher weight to that item. Examiners are expected to verify that banks are correctly reporting the information requested on the Reports of Condition and Income, which are used in computing banks' risk-based capital ratios.

SELECTED SUPERVISORY CONSIDERATIONS FOR CALCULATING AND EVALUATING RISK-BASED CAPITAL

Certain requirements and factors should be considered in assessing the risk-based capital ratios and the overall capital adequacy of banks. Analysis of these requirements and factors may have a material impact on the amount of capital banks must hold to appropriately support certain activities for on- and off-balance-sheet items and must be considered in assessing compliance with the guidelines. The requirements and factors to be considered relate to certain capital elements, capital adjustments, balance-sheet activities, off-balance-sheet activities, and the overall assessment of capital adequacy. The considerations to be taken into account for each of these items are discussed in the following five subsections.

Capital Elements

This subsection discusses the characteristics of the principal types of capital elements. It also covers terms and conditions that may disqualify an instrument from inclusion in a particular element of capital. If the terms and conditions of a particular instrument cause uncertainty as to how the instrument should be treated for capital purposes, it may be necessary to consult with Federal Reserve staff for a final determination.

Common Stockholders' Equity

Common stockholders' equity includes common stock; related surplus; and retained earnings, including capital reserves and adjustments for the cumulative effect of foreign-currency translation, net of any treasury stock. A capital instrument that is not permanent or that has preference with regard to liquidation or the payment of dividends is not deemed to be common stock, regardless of whether or not it is called common stock. Other preferences may also call into question whether the capital instrument is common stock. Close scrutiny should be paid to the terms of common-stock issues of banks that have issued more than one class of common stock. If preference features are found in one of the classes, that class generally should not be treated as common stock.

From a supervisory standpoint, it is desirable that voting common stockholders' equity remain the dominant form of tier 1 capital. Accordingly, the risk-based capital guidelines state that banks should avoid overreliance on nonvoting equity elements in tier 1 capital. Nonvoting equity elements can arise in connection with common stockholders' equity in cases where a bank has two classes of common stock, one voting and the other nonvoting. Alternatively, one class may have so-called super-voting rights entitling the holder to substantially more votes per share than the other class. In this case, the super-voting shares may have so many votes per share that the voting power of the other shares is effectively overwhelmed.

Banks that have nonvoting, or effectively nonvoting, common equity and tier 1 perpetual preferred stock in excess of their voting common stock are clearly overrelying on nonvoting equity elements in tier 1 capital. In such cases, it may be appropriate to reallocate some of the nonvoting equity elements from tier 1 capital to tier 2 capital.

Perpetual Preferred Stock

The risk-based capital guidelines define perpetual preferred stock as preferred stock that has no maturity date, cannot be redeemed at the option of the holder, and has no other provisions that will require future redemption of the issue. Perpetual preferred stock qualifies for inclusion

in capital only if it can absorb losses while the issuer operates as a going concern and only if the issuer has the ability and legal right to defer or eliminate preferred dividends.

Perpetual preferred stock with a feature permitting redemption at the option of the issuer may qualify for tier 1 or unlimited tier 2 capital only if the redemption is subject to prior approval of the Federal Reserve. An issue that is convertible at the option of the issuer into another issue of perpetual preferred stock or a lower form of capital, such as subordinated debt, is considered to be redeemable at the option of the issuer. Accordingly, such a conversion must be subject to prior Federal Reserve approval.

Banks may include perpetual preferred stock in tier 1 capital only if the stock is noncumulative. A noncumulative issue may not permit the accruing or payment of unpaid dividends in any form, including the form of dividends payable in common stock. Perpetual preferred stock that calls for the accumulation and future payment of unpaid dividends is deemed to be cumulative, regardless of whether or not it is called noncumulative, and is generally includable in tier 2 capital.

Perpetual preferred stock (including auction-rate preferred) in which the dividend rate is reset periodically based, in whole or in part, upon the bank's financial condition or credit standing is excluded from tier 1 capital, but may generally be included in tier 2 capital. The obligation under such instruments to pay out higher dividends when a bank's condition deteriorates is inconsistent with the essential precept that capital should provide both strength- and loss-absorption capacity to a bank during periods of adversity.

Ordinarily, fixed-rate preferred stock and traditional floating- or adjustable-rate preferred—where the dividend rate adjusts in relation to an independent index based solely on general-market interest rates and that is in no way tied to the issuer's financial condition—do not raise significant supervisory concerns, especially where the adjustable-rate instrument is accompanied by reasonable spreads and cap rates. Such instruments may generally be included in tier 1 capital, provided that they are noncumulative.

Some preferred-stock issues incorporate certain features that raise serious questions about whether these issues will truly serve as a permanent, or even long-term, source of capital. Such features include so-called exploding-rate or similar mechanisms, where, after a specified period, the dividend rate automatically increases to a level that could create an incentive for the issuer to redeem the instrument. Perpetual preferred stock with this type of feature could cause the issuing bank to be faced with the higher dividend requirements at a future date when the bank may be experiencing financial difficulties; it is generally not includable in tier 1 capital.

Traditional convertible perpetual preferred stock, which the holder can convert into a fixed number of common shares at a preset price, ordinarily does not raise supervisory concerns and therefore generally qualifies as tier 1 capital, provided that the stock is noncumulative. However, forms of preferred stock which the holder must or can convert into common stock at the market price prevailing at the time of conversion do raise supervisory concerns. Such preferred stock may be converted into an increasing number of common shares as the bank's condition deteriorates, and as the market price of the common stock falls. The potential conversion of such preferred stock into common stock could pose a threat of dilution to the existing common shareholders. The threat of dilution could make the issuer reluctant to sell new common stock or place the issuer under strong market pressure to redeem or repurchase the convertible preferred. Such convertible preferred stock should generally be excluded from tier 1 capital.

Perpetual preferred stock issues may include other provisions or pricing mechanisms that would provide significant incentives or pressures for the issuer to redeem the stock for cash, especially at a time when the issuer is in a weakened financial condition. As a general matter, an issue that contains such features would be ineligible for tier 1 treatment.

While no formal limit is placed on the amount of noncumulative perpetual preferred stock that may be included in tier 1 capital, the guidelines state that banks should avoid overreliance on preferred stock and other nonvoting equity elements in tier 1 capital. A bank that includes in tier 1 capital perpetual preferred stock in an amount in excess of its voting common stock is clearly overrelying on perpetual preferred stock in tier 1 capital. In such cases, it may be appropriate to reallocate the excess amount of perpetual preferred stock from tier 1 capital to tier 2 capital.

Minority Interest in Equity Accounts of Consolidated Subsidiaries

Minority interest in equity accounts of consolidated subsidiaries is included in tier 1 capital because, as a general rule, it represents equity that is freely available to absorb losses in operating subsidiaries. Banks are expected to avoid using minority interest as an avenue for introducing elements that do not otherwise qualify as tier 1 capital (such as cumulative or auction-rate perpetual preferred stock) or that would, in effect, result in an excessive reliance on preferred stock within tier 1 capital. If a bank uses minority interest in these ways, supervisory concerns may warrant reallocating some of the bank's minority interest in equity accounts of consolidated subsidiaries from tier 1 to tier 2 capital.

Whenever a bank has included perpetual preferred stock of an operating subsidiary in minority interest, a possibility exists that such capital has been issued in excess of the subsidiary's needs for the purpose of raising cheaper capital for the bank. Stock issued under these circumstances may, in substance if not in legal form, be secured by the subsidiary's assets. If the subsidiary fails, the outside preferred investors would have a claim on the subsidiary's assets that is senior to the claim that the bank, as a common shareholder, has on those assets. Therefore, as a general matter, issuances in excess of a subsidiary's needs do not qualify for inclusion in capital. The possibility that a secured arrangement exists should be considered if the subsidiary on-lends significant amounts of funds to the parent bank, is unusually well capitalized, has cash flow in excess of its operating needs, holds a significant amount of assets with minimal credit risk (for example, U.S. Treasury securities) that are not consistent with its operations, or has issued preferred stock at a significantly lower rate than the parent could obtain for a direct issue.

Some banks may use a nonoperating subsidiary or special-purpose entity (SPE) to issue perpetual preferred stock to outside investors. Such a subsidiary may be set up offshore so a bank can receive favorable tax treatment for the dividends paid on the stock. In such arrangements, a strong presumption exists that the stock is, in effect, secured by the assets of the subsidiary. It has been agreed internationally that a bank may not include in its tier 1 capital minority interest in the perpetual preferred stock of nonoperating subsidiaries. Furthermore, such minority interest may not be included in tier 2 capital unless a bank can conclusively prove that the stock is unsecured. Even if the bank's accountants have permitted the bank to account for perpetual preferred stock issued through an SPE as stock of the bank, rather than as minority interest in the equity accounts of a consolidated subsidiary, the stock may not be included in tier 1 capital and most likely is not includable in tier 2 capital.

Banks may also use operating or nonoperating subsidiaries to issue subordinated debt. As with perpetual preferred stock issued through such subsidiaries, a possibility exists that such debt is in effect secured and therefore not includable in capital.

Allowance for Loan and Lease Losses

The allowance for loan and lease losses is a reserve that has been established through a charge against earnings to absorb anticipated, but not yet identified, losses on loans or lease-financing receivables. The allowance excludes allocated transfer-risk reserves and reserves created against identified losses. Neither of these two types of reserves is includable in capital. The amount of the allowance for loan and lease losses that is includable in tier 2 capital is limited to 1.25 percent of risk-weighted assets.

Net Unrealized Holding Gains (Losses) on Securities Available for Sale

The Financial Accounting Standards Board's Statement No. 115, "Accounting for Certain Investments in Debt and Equity Securities" (FASB 115) created a new common stockholders' equity account known as "net unrealized holding gains (losses) on securities available for sale." Although this equity account is considered to be part of a bank's GAAP equity capital, this account should not be included in a bank's regulatory capital calculations. There are exceptions, however, to this rule. A bank that legally holds equity securities in its available-for-sale portfolio[6] may include up to 45 percent of the

6. Although banks are generally not allowed to hold equity securities except in lieu of debts previously contracted and certain mutual fund holdings, some banks have grandfathered holdings of equity securities in accordance with provisions in the National Bank Act passed in the 1930s.

pretax net unrealized holding gains on those securities in tier 2 capital. These equity securities must be valued in accordance with generally accepted accounting principles and have readily determinable fair values. Unrealized holding gains may not be included in tier 2 capital if the Federal Reserve determines that the equity securities were not prudently valued. Moreover, if a bank experiences unrealized holding losses in its available-for-sale equity portfolio, these losses must be deducted from tier 1 capital.

Mandatory Convertible Debt Securities

Mandatory convertible debt securities are essentially subordinated debt securities that receive special capital treatment because a bank has committed to repay the principal from proceeds obtained through the issuance of equity. Banks may include such securities (net of any stock issued that has been dedicated to their retirement) in the form of equity contract notes or in the form of equity commitment notes[7] issued before May 15, 1985, as unlimited elements of tier 2 capital, provided that the criteria set forth in 12 CFR 225, appendix B, are met. Consistent with these criteria, mandatory convertible notes are subject to a maximum maturity of 12 years, and a bank must receive Federal Reserve approval before redeeming (or repurchasing) such securities prior to maturity. The terms of the securities should note that such approval is required.

If a bank has issued common or perpetual preferred stock and dedicated the proceeds to the retirement or redemption of mandatory convertibles,[8] the portion of mandatory convertibles covered by the dedication no longer carries a commitment to issue equity and is effectively rendered into ordinary subordinated debt. Accordingly, the amount of the stock dedicated is netted from the amount of mandatory convertibles includable as unlimited tier 2 capital. The portion of such securities covered by dedications should be included in capital as subordinated debt, subject to amortization in the last five years of its life and limited, together with other subordinated debt and intermediate-term preferred stock, to 50 percent of tier 1 capital. For example, a bank has an outstanding equity contract note for $1 million and issues $300,000 of common stock, dedicating the proceeds to the retirement of the note. The bank would include the $300,000 of common stock in its tier 1 capital. The $700,000 of the equity contract note not covered by the dedication would be treated as an unlimited element of the bank's tier 2 capital. The $300,000 of the note covered by the dedication would be treated as subordinated debt.

In some cases, the indenture of a mandatory convertible debt issue may require the bank to set up segregated trust funds to hold the proceeds from the sale of equity securities dedicated to pay off the principal of the mandatory convertibles at maturity. The portion of mandatory convertible securities covered by the amount of such segregated trust funds is considered secured and may therefore not be included in capital. The maintenance of such a separate segregated fund for the redemption of mandatory convertibles exceeds the requirements of 12 CFR 225, appendix B. Accordingly, if a bank, with the agreement of the debtholders, seeks regulatory approval to eliminate the fund, such approval normally should be given unless supervisory concerns warrant otherwise.

Subordinated Debt and Intermediate-Term Preferred Stock

To qualify as supplementary capital, subordinated debt and intermediate-term preferred stock must have an original average maturity of at least five years. The average maturity of an obligation whose principal is repayable in scheduled periodic payments (for example, a so-called serial-redemption issue) is the weighted average of the maturities of all such scheduled repayments. If the holder has the option to require the issuer to redeem, repay, or repurchase the instrument before the original stated maturity, maturity is defined as the earliest possible date on which the holder can put the instrument back to the issuing bank. This date

7. Equity contract notes are debt securities that obligate the holder to take common or perpetual preferred stock for repayment of principal. Equity commitment notes are redeemable only with the proceeds from the sale of common or perpetual preferred stock.

8. Such a dedication generally must be made in the quarter in which the new common or perpetual preferred stock is issued. There are no restrictions on the actual use of the proceeds of dedicated stock. For example, stock issued under dividend reinvestment plans or issued to finance acquisitions may be dedicated to the retirement of mandatory convertible debt securities.

may be much earlier than the instrument's stated maturity date. In the last five years before the maturity of a limited-life instrument, the outstanding amount includable in tier 2 capital must be discounted by 20 percent a year. The aggregate amount of subordinated debt and intermediate-term preferred stock that may be included in tier 2 capital is limited to 50 percent of tier 1 capital.

Consistent with longstanding Federal Reserve policy, a bank may not repay, redeem, or repurchase a subordinated debt issue without the prior written approval of the Federal Reserve. The terms of the debt indenture should note that such approval is required. The Federal Reserve requires such approval to prevent a deteriorating institution from redeeming capital at a time when it needs to conserve its resources and to ensure that subordinated debtholders in a failing bank are not paid before depositors.

Close scrutiny should be given to terms that permit the holder to accelerate payment of principal upon the occurrence of certain events. The only acceleration clauses acceptable in a subordinated debt issue included in tier 2 capital are those that are triggered by the issuer's insolvency, that is, appointment of a receiver. Terms that permit the holder to accelerate payment of principal upon the occurrence of other events jeopardize the subordination of the debt since such terms could permit debtholders in a troubled institution to be paid out before the depositors. In addition, debt whose terms permit holders to accelerate payment of principal upon the occurrence of events other than insolvency does not meet the minimum five-year maturity requirement for debt capital instruments. Holders of such debt have the right to put the debt back to the issuer upon the occurrence of the named events, which could happen on a date well in advance of the debt's stated maturity.

Close scrutiny should also be given to the terms of those debt issues where an event of default is defined more broadly than insolvency or a failure to pay interest or principal when due. There is a strong possibility that such terms are inconsistent with safe and sound banking practice, so the debt issue should not be included in capital. Concern is heightened where an event of default gives the holder the right to accelerate payment of principal or where other borrowings exist that contain cross-default clauses. Some events of default, such as issuing jumbo certificates of deposit or making additional borrowings in excess of a certain amount, may unduly restrict the day-to-day operations of the bank. Other events of default, such as change of control of the bank or disposal of a bank subsidiary, may limit the flexibility of management or banking supervisors to work out the problems of a troubled bank. Still other events of default, such as failure to maintain certain capital ratios or rates of return or to limit the amount of nonperforming assets or charge-offs to a certain level, may be intended to allow the debtholder to be made whole before a deteriorating institution becomes truly troubled. Debt issues that include any of these types of events of default are not truly subordinated and should not be included in capital. Likewise, banks should not include debt issues in capital that otherwise contain terms or covenants that could adversely affect the liquidity of the issuer; unduly restrict management's flexibility to run the organization, particularly in times of financial difficulty; or limit the regulator's ability to resolve problem-bank situations.

Debt issues, including mandatory convertible securities, where interest payments are tied to the financial condition of the borrower should generally not be included in capital. The interest payments may be linked to the financial condition of an institution through various ways, such as (1) an auction-rate mechanism; (2) a preset schedule mandating interest-rate increases, either as the credit rating of the bank declines or over the passage of time;[9] or (3) a term that raises the interest rate if payment is not made in a timely fashion. These debt issues raise concerns because as the financial condition of a bank declines, it faces ever-increasing payments on its credit-sensitive subordinated debt at a time when it most needs to conserve its resources. Thus, credit-sensitive debt does not provide the support expected of a capital instrument to an institution whose financial condition is deteriorating; rather, the credit-sensitive feature

9. Although payment on debt whose interest rate increases over time may not on the surface appear to be directly linked to the financial condition of the issuing bank, such debt (sometimes referred to as expanding- or exploding-rate debt) has a strong potential to be credit sensitive in substance. Banks whose financial condition has strengthened are more likely to be able to refinance the debt at a lower rate than that mandated by the preset increase, whereas banks whose condition has deteriorated are less likely to do so. Moreover, just when these latter institutions would be in the most need of conserving capital, they would be under strong pressure to redeem the debt as an alternative to paying higher rates and would therefore accelerate depletion of their resources.

can accelerate depletion of the institution's resources and increase the likelihood of default on the debt. While such terms may be acceptable in perpetual preferred stock qualifying for tier 2 capital, they are not acceptable in a capital-debt issue because a bank in a deteriorating financial condition does not have the option available in equity issues of eliminating the higher payments without going into default.

When a bank has included subordinated debt issued by an operating or nonoperating subsidiary in its capital, a possibility exists that the debt is in effect secured and, thus, not includable in capital. Further details on arrangements regarding a bank's issuance of capital instruments through subsidiaries are discussed in an earlier subsection, ''Minority Interest in Equity Accounts of Consolidated Subsidiaries.''

Capital Adjustments

Intangible Assets

Review and monitoring. In general, a bank should review all its intangible assets at least quarterly to adequately monitor their level and quality. The bank should adequately document each intangible asset's original and current carrying amount, as well as the basis for the amortization period, amortization method, and any related adjustments. Carrying values should be reduced using appropriate amortization methods and prudent amortization periods. During its annual audit, a bank should reassess such values and the supporting documentation, as well as review the evidence of title to the intangible assets. The carrying amount of an intangible asset that exceeds its value to the institution should be written down. Intangible assets that are no longer of value to the institution should be written off. The Federal Reserve may require, on a case-by-case basis, an independent valuation of a bank's intangible assets.

Banks must review the book value of all intangible assets at least quarterly and make adjustments to these values as necessary. The fair value of mortgage-servicing assets (MSAs), nonmortgage-servicing assets (NMSAs, and collectively with MSAs, servicing assets), and purchased credit-card relationships (PCCRs) must also be determined at least quarterly. This determination of fair value should include adjustments for any significant changes in original valuation assumptions, including changes in prepayment estimates or account attrition rates. Examiners should review both the book value and fair value assigned to these assets, as well as supporting documentation.

Capital adjustments. All goodwill and nonqualifying identifiable intangible assets must be deducted from a bank's tier 1 capital.[10] The only identifiable intangible assets that are eligible to be included in—that is, not deducted from—a bank's capital are MSAs, NMSAs, and PCCRs.[11] The total amount of servicing assets and PCCRs that may be included in a bank's capital, in the aggregate, may not exceed 100 percent of tier 1 capital. The total amount of NMSAs and PCCRs is subject to a separate aggregate sublimit of 25 percent of tier 1 capital.

Amounts of servicing assets and PCCRs in excess of these limitations, as well as identifiable intangible assets, including core deposit intangibles and favorable leaseholds, are to be deducted from a bank's core capital elements in determining tier 1 capital. Identifiable intangible assets (other than PMSRs and PCCRs) acquired on or before February 19, 1992, however, will generally not be deducted from capital for supervisory purposes, although they will continue to be deducted for applications purposes.

For purposes of calculating limitations on servicing assets and PCCRs, tier 1 capital is defined as the sum of core capital elements, net of goodwill, and net of all identifiable intangible assets other than servicing assets and PCCRs, regardless of the date acquired, but before the deduction of deferred-tax assets. Banks may elect to deduct disallowed servicing assets on a basis that is net of any associated deferred-tax liability. Deferred-tax liabilities netted in this manner cannot also be netted against deferred-

10. Negative goodwill is a liability and is therefore not taken into account in the risk-based capital framework. Accordingly, a bank may not offset goodwill in order to reduce the amount of goodwill it must deduct from tier 1 capital.

11. Purchased mortgage-servicing rights (PMSRs) no longer exist under the most recent accounting rules that apply to servicing of assets. Under these rules (Financial Accounting Standards Board statements No. 122, ''Accounting for Mortgage Servicing Rights,'' and No. 125, ''Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities''), organizations are required to recognize separate servicing assets (or liabilities) for the contractual obligation to service financial assets that entities have either sold or securitized with servicing retained.

tax assets when determining the amount of deferred-tax assets that are dependent on future taxable income. The amount of eligible servicing assets and PCCRs that a bank may include in capital is further limited to the lesser of 90 percent of their fair value, or 100 percent of their book value, as adjusted for capital purposes in accordance with the instructions in the commercial bank Consolidated Report of Condition and Income (call report). If both the application of the limits on eligible intangible assets and the adjustment of the balance-sheet amount for these assets would result in an amount being deducted from capital, the bank would deduct only the greater of the two amounts from its core capital elements in determining tier 1 capital.

Consistent with longstanding Federal Reserve policy, banks experiencing substantial growth, whether internally or by acquisition, are expected to maintain strong capital positions substantially above minimum supervisory levels, without significant reliance on intangible assets. An arrangement whereby a bank enters into a licensing or leasing agreement or similar transaction to avoid booking an intangible asset should be subject to particularly close scrutiny. Normally, such arrangements will be dealt with by adjusting the bank's capital calculation in an appropriate manner. In making an overall assessment of a bank's capital adequacy for applications purposes, the institution's quality and composition of capital are considered together with its holdings of tangible and intangible assets.

Disallowed Deferred-Tax Assets

In response to the Financial Accounting Standards Board's Statement No. 109, "Accounting for Income Taxes" (FASB 109), the Federal Reserve adopted a limit on the amount of certain deferred-tax assets that may be included in (that is, not deducted from) tier 1 capital for risk-based and leverage capital purposes.

Under the rule, deferred-tax assets that can only be realized if an institution earns taxable income in the future are limited for regulatory capital purposes to the amount that the institution expects to realize within one year of the quarter-end report date—based on its projection of taxable income—or 10 percent of tier 1 capital, whichever is less. Deferred-tax assets that can be realized from taxes paid in prior carry-back years are generally not limited. The disallowed deferred-tax assets are subtracted from tier 1 capital and from risk-weighted assets.

Investments in Unconsolidated Banking and Finance Subsidiaries and Other Subsidiaries

Generally, debt and equity capital investments and any other instruments deemed to be capital in unconsolidated banking and finance subsidiaries[12] are to be deducted from the consolidated capital of the parent bank, regardless of whether the investment is made by the parent bank or its direct or indirect subsidiaries.[13] Fifty percent of the investment is to be deducted from tier 1 capital and 50 percent from tier 2 capital. In cases where tier 2 capital is not sufficient to absorb the portion (50 percent) of the investment allocated to it, the remainder (up to 100 percent) is to be deducted from tier 1 capital.

Advances to banking and finance subsidiaries (that is, loans, extensions of credit, guarantees, commitments, or any other credit exposures) not considered as capital are included in risk-weighted assets at the 100 percent risk weight (unless recognized collateral or guarantees dictate weighting at a lower percentage). However, such advances may be deducted from the parent bank's consolidated capital where examiners find that the risks associated with the advances are similar to the risks associated with capital investments, or if such advances possess risk factors that warrant an adjustment to capital for supervisory purposes. These risk factors could include the absence of collateral support or the clear intention of banks to allow the advances to serve as capital to subsidiaries regardless of form.

Although the Federal Reserve does not automatically deduct investments in other unconsolidated subsidiaries or investments in joint ventures and associated companies,[14] the level and

12. A banking and finance subsidiary is generally defined as any company engaged in banking or finance in which the parent organization holds directly or indirectly more than 50 percent of the outstanding voting stock, or which is otherwise controlled or capable of being controlled by the parent organization.

13. An exception to this deduction is to be made in the case of shares acquired in the regular course of securing or collecting a debt previously contracted in good faith.

14. The definition of such entities is contained in the instructions to the call report. Associated companies and joint ventures are generally defined as companies in which the bank owns 20 to 50 percent of the voting stock.

nature of such investments should be closely monitored. Resources invested in these entities support assets that are not consolidated with the rest of the bank and therefore may not be generally available to support additional leverage or absorb losses of affiliated institutions. Close monitoring is also necessary, as experience has shown that banks often stand behind the losses of affiliated institutions in order to protect the reputation of the organization as a whole. In some cases, this has led to losses that have exceeded the investments in such entities.

Accordingly, for risk-based capital purposes, a bank may be required, on a case-by-case basis, to (1) deduct such investments from total capital; (2) apply an appropriate risk-weighted charge against the bank's pro rata share of the assets of the affiliated entity; (3) consolidate the entity on a line-by-line basis; or (4) operate with a risk-based capital ratio above the minimum. In determining the appropriate capital treatment for such actions, the Federal Reserve will generally take into account whether (1) the bank has significant influence over the financial or managerial policies or operations of the affiliated entity, (2) the bank is the largest investor in the entity, or (3) other circumstances prevail (such as the existence of significant guarantees from the bank) that appear to closely tie the activities of the affiliated company to the bank.

Reciprocal Holdings of Banking Organizations' Capital Instruments

Reciprocal holdings are intentional cross-holdings resulting from formal or informal arrangements between banking organizations to swap or exchange each other's capital instruments. Such holdings of other banking organizations' capital instruments are to be deducted from the total capital of an organization for the purpose of determining the total risk-based capital ratio. Holdings of other banking organizations' capital instruments taken in satisfaction of debts previously contracted or that constitute stake-out investments that comply with the Federal Reserve's policy statement on nonvoting equity investments (12 CFR 225.143) are not deemed to be intentional cross-holdings and are therefore not deducted from a bank's capital.

Balance-Sheet Activities

Claims on, and Claims Guaranteed by, OECD Central Governments

The risk-based capital guidelines assign a zero percent risk weight to all direct claims (including securities, loans, and leases) on the central governments of the OECD-based group of countries and U.S. government agencies. Generally, the only direct claims banks have on the U.S. government and its agencies take the form of Treasury securities. Zero-coupon, that is, single-payment, Treasury securities trading under the U.S. Treasury's Separately Traded Registered Interest and Principal (STRIP) program are assigned to the zero percent risk category. A security that has been stripped by a private-sector entity, such as a brokerage firm, is considered an obligation of that entity and is accordingly assigned to the 100 percent risk category.

Claims that are directly and unconditionally guaranteed by an OECD-based central government or a U.S. government agency are also assigned to the zero percent risk category. Claims that are directly but conditionally guaranteed are assigned to the 20 percent risk category. A claim is considered to be conditionally guaranteed by a central government if the validity of the guarantee is dependent upon some affirmative action by the holder or a third party. Generally, securities guaranteed by the U.S. government or its agencies that are actively traded in financial markets are considered to be unconditionally guaranteed. These include Government National Mortgage Association (GNMA or Ginnie Mae) and Small Business Administration (SBA) securities.

A limited number of U.S. government agency–guaranteed loans are deemed to be unconditionally guaranteed and can be assigned to the zero percent risk category. These include most loans guaranteed by the Export-Import Bank (Eximbank),[15] loans guaranteed by the U.S. Agency for International Development (AID) under its Housing Guaranty Loan Program, SBA loans subject to a secondary participation guaranty in accordance with SBA form 1086, and Farmers Home Administration (FmHA) loans subject to

15. Loans guaranteed under Eximbank's Working Capital Guarantee Program, however, receive a 20 percent risk weight.

an assignment guaranty agreement in accordance with FmHA form 449-36.

Apart from the exceptions noted in the preceding paragraph, loans guaranteed by the U.S. government or its agencies are considered to be conditionally guaranteed. The guaranteed portion of such loans is assigned to the 20 percent risk category. These include, but are not limited to, loans guaranteed by the Commodity Credit Corporation (CCC), the Federal Housing Administration (FHA), the Overseas Private Investment Corporation (OPIC), the Department of Veterans Affairs (VA), and, except as indicated above, the FmHA and SBA. Loan guarantees offered by OPIC often guarantee against political risk. However, only that portion of a loan guaranteed by OPIC against commercial or credit risk may receive a preferential 20 percent risk weight. The portion of government trust certificates issued to provide funds for the refinancing of foreign military sales loans made by the Federal Financing Bank or the Defense Security Assistance Agency that are indirectly guaranteed by the U.S. government also qualify for the 20 percent risk weight.

Most guaranteed student loans are guaranteed by a state agency or nonprofit organization that does not have the full faith and credit backing of the state. The loans are then indirectly guaranteed or reinsured by the U.S. government's Guaranteed Student Loan Program. Under the program, a minimum percentage of the loan is reinsured, but a higher percentage could be guaranteed if the bank has experienced an overall low default rate on guaranteed student loans. Only the portion of the loan covered by the minimum guarantee under the program may be assigned to the 20 percent risk category; the remainder should be assigned a 100 percent risk weight.

Claims on, or Guaranteed by, a U.S. Government–Sponsored Agency

U.S. government–sponsored agencies are agencies originally established or chartered by the federal government to serve public purposes specified by the U.S. Congress. Such agencies generally carry out functions performed directly by the central government in other countries. The obligations of government-sponsored agencies generally are not explicitly guaranteed by the full faith and credit of the U.S. government. Claims (including securities, loans, and leases) on, or guaranteed by, such agencies are assigned to the 20 percent risk category. U.S. government–sponsored agencies include, but are not limited to, the College Construction Loan Insurance Association, Farm Credit Administration, Federal Agricultural Mortgage Corporation, Federal Home Loan Bank System, Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), Federal National Mortgage Association (FNMA or Fannie Mae), Financing Corporation (FICO), Postal Service, Resolution Funding Corporation (REFCORP), Student Loan Marketing Association (SLMA or Sallie Mae), Smithsonian Institution, and Tennessee Valley Authority (TVA).

Mortgage-Backed Securities

For risk-based capital purposes, mortgage-backed securities (MBSs), including pass-throughs, collateralized mortgage obligations (CMOs), and real estate mortgage investment conduits (REMICs), fall into one of three categories:

1. *MBSs issued or guaranteed by a U.S. government agency or U.S. government–sponsored agency.*
   - U.S. government agency MBSs, that is, Government National Mortgage Association securities, are generally assigned a zero percent risk weight. U.S. government–sponsored agency MBSs, that is, Federal National Mortgage Association and Federal Home Loan Mortgage Corporation securities, are generally assigned a 20 percent risk weight.
2. *Privately issued MBSs meeting certain criteria.*
   - Privately issued MBSs are generally treated as indirect holdings of the underlying assets and assigned to the same risk category as the underlying assets, but in no case to the zero percent risk category. Examiners should review privately issued MBSs that are assigned a preferential risk weight to ensure they meet the criteria specified in the guidelines for treatment as indirect holdings of the underlying assets. Those that do not meet the criteria are assigned to the 100 percent risk category.
   - If the underlying assets of a privately issued MBS are composed of two or more types of assets that could be assigned to

different risk categories, the entire MBS is assigned to the highest risk category.

3. *Stripped MBSs and similar instruments.*
   - This category includes interest-only strips (IOs), principal-only strips (POs), and any class of an MBS that can absorb more than its pro rata share of loss without the whole issue being in default (for example, a so-called subordinated class or residual interest).
   - All such MBSs are assigned to the 100 percent risk category, even if they are issued or guaranteed by a U.S. government agency or U.S. government–sponsored agency.

Loans Secured by First Liens on One- to Four-Family Residential Properties and Multifamily Residential Properties

Qualifying loans on one- to four-family residential properties, either owner-occupied or rented (as defined in the instructions to the call report), are accorded a 50 percent risk weight under the guidelines. Loans to builders with substantial project equity for the construction of one- to four-family residences that have been presold under firm contracts to purchasers who have obtained firm commitments for permanent qualifying mortgage loans and have made substantial earnest-money deposits are also eligible for the 50 percent risk weight.

In addition, qualifying multifamily residential loans that meet certain criteria may be assigned to the 50 percent risk category. These criteria are as follows: All principal and interest payments must have been made on time for at least one year preceding placement in the 50 percent risk category, amortization of the principal and interest must occur within 30 years, the minimum original maturity for repayment of principal cannot be less than seven years, and annual net operating income (before debt service) generated by the property during the most recent fiscal year must not be less than 120 percent of the loan's current annual debt service (115 percent if the loan is based on a floating interest rate). In the case of cooperative or other not-for-profit housing projects, the property must generate sufficient cash flow to provide comparable protection to the bank.

To ensure that only qualifying residential mortgage loans are assigned to this preferential risk weight, examiners are to review the one- to four-family and multifamily residential real estate loans that are included in the 50 percent risk category. Such loans are not eligible for preferential treatment unless they meet the following criteria: The loans are made subject to prudent underwriting standards, the loans are performing in accordance with their original terms and are not delinquent for 90 days or more or carried on nonaccrual status, and the loan-to-value ratios are conservative.[16] For the purpose of this last criterion, the loan-to-value ratio should be based upon the value of the property determined by the most current appraisal or, if appropriate, the most current evaluation. Normally, this would be the appraisal or evaluation performed at the time the loan was originated.[17]

If a bank has assigned a 50 percent risk weight to residential mortgage loans made for the purpose of speculative real estate development or whose eligibility for such preferential treatment is otherwise questionable, and the amounts of nonqualifying loans are readily identifiable, such loans should be reassigned to the 100 percent risk-weight category. If material evidence exists that a bank has assigned a preferential risk weight to residential mortgage loans of questionable eligibility, but the amount of the inappropriately weighted amount cannot be readily identified, the overall evaluation of the bank's capital adequacy should reflect a higher capital requirement than would otherwise be the case.

Accrued Interest

Banks normally report accrued interest on loans and securities in ''Other Assets'' on the call report. The majority of banks will risk weight the entire amount of accrued interest at 100 percent. However, for risk-based capital purposes, a bank is permitted to allocate accrued interest among the risk categories associated with the underlying claims provided that it has systems in place to carry out such an allocation accurately.

16. A conservative loan-to-value ratio for loans secured by multifamily residential property must not exceed 80 percent (75 percent if the loan is based on a floating interest rate).

17. In cases where both first and junior liens are held by the bank and no intervening liens exist, these transactions are treated as single loans secured by a first lien for the purpose of determining the loan-to-value ratio.

Off-Balance-Sheet Activities

Assets Sold with Recourse

For risk-based capital adequacy purposes, a bank must hold capital against assets sold with recourse if the bank retains any risk of loss. To qualify as an asset sale with recourse, a transfer of assets must first qualify as a sale according to the GAAP criteria set forth in the Financial Accounting Standards Board's Statement No. 125, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities." These criteria are summarized in the definition of "transfers of financial assets" in the glossary to the commercial bank call report instructions. If a transfer of assets does not meet these criteria, the assets must remain on the bank's balance sheet and are subject to the standard risk-based capital charge.

If a transfer of assets qualifies as a sale under GAAP, but the bank retains any risk of loss or obligation for payment of principal or interest, then the transfer is considered to be a sale with recourse. A more detailed definition of an asset sale with recourse may be found in the definition of "sales of assets for risk-based capital purposes" in the glossary to the commercial bank call report instructions. Although the assets are removed from a bank's balance sheet in an asset sale with recourse, they should be converted at 100 percent to an on-balance-sheet credit-equivalent amount and assigned to the risk weight appropriate to the obligor. This also applies when the contractual terms of the recourse agreement limit the seller's risk to a percentage of the value of the assets sold or to a specific dollar amount.

If, however, the risk retained by the seller is limited to some fixed percentage of any losses that might be incurred and there are no other provisions resulting in the direct or indirect retention of risk by the seller, the maximum amount of possible loss for which the selling bank is at risk (the stated percentage times the amount of assets to which the percentage applies) is subject to risk-based capital requirements. The remaining amount of assets transferred would be treated as a sale that is not subject to the risk-based capital requirements. For example, a seller would treat a sale of $1 million in assets with a recourse provision that the seller and buyer proportionately share in losses incurred on a 10 percent and 90 percent basis, respectively, and with no other retention of risk by the seller, as a $100,000 asset sale with recourse and a $900,000 sale not subject to risk-based capital requirements.

There are several exceptions to this general reporting rule for recourse transactions. The first exception applies to recourse transactions for which the amount of recourse the institution is contractually liable for is less than the capital requirement for the assets transferred under the recourse agreement. For such transactions, a bank must hold capital equal to its maximum contractual recourse obligation. For example, assume an institution transfers a $100 pool of commercial loans and retains a recourse obligation of 2 percent. Ordinarily, the bank would be subject to an 8 percent capital charge, or $8. Because the recourse obligation is only 2 percent, however, the bank would be required to hold capital of $2 against the recourse exposure. This capital charge may be reduced further by the balance of any associated noncapital GAAP recourse liability account.

A second exception to the general rule applies to the transfer of small-business loans and leases on personal property with recourse. A bank that is considered to be well capitalized according to the Federal Reserve's prompt-corrective-action framework shall include in risk-weighted assets only the amount of retained recourse—instead of the entire amount of assets transferred—in connection with a transfer of small-business loans or leases on personal property with recourse, provided two conditions are met. First, the transaction must be treated as a sale under GAAP; second, the bank must establish a noncapital reserve that is sufficient to cover the bank's estimated liability under the recourse arrangement. With the Board's approval, this exception may also apply to a bank that is considered to be adequately capitalized under the prompt-corrective-action framework. The total outstanding amount of recourse retained under such transactions may not exceed 15 percent of a bank's total risk-based capital without Board approval.

Distinction Between Financial and Performance Standby Letters of Credit

For risk-based capital purposes, the vast majority of standby letters of credit a bank issues are considered financial in nature. On the one hand, in issuing a financial standby letter of credit, a bank guarantees the account party will fulfill a

contractual financial obligation that involves payment of money. In issuing a performance letter of credit, on the other hand, a bank guarantees that the account party will fulfill a contractual nonfinancial obligation, that is, an obligation that does not entail the payment of money. For example, a standby letter of credit that guarantees that an insurance company will pay as required under the terms of a policy is deemed to be financial and is converted at 100 percent, while a standby that guarantees a contractor will pave a street according to certain specifications is deemed to be performance-related and is converted at 50 percent. Financial standby letters of credit have a higher conversion factor in large part because, unlike performance standby letters of credit, they tend to be drawn down only when the account party's financial condition has deteriorated.

Participations of Off-Balance-Sheet Transactions

If a standby letter of credit or commitment has been participated to other institutions in the form of a syndication as defined in the instructions to the call report, that is, where each bank is responsible only for its pro rata share of loss and there is no recourse to the originating bank, each bank includes only its pro rata share of the standby or commitment in its risk-based capital calculation.

The treatment differs, however, if the participation takes the form of a conveyance of a risk participation. In such a participation, the originating bank remains liable to the beneficiary for the full amount of the standby or commitment if the institution that has acquired the participation fails to pay when the instrument is drawn. Under this arrangement, the originating bank is exposed to the credit risk of the institution that has acquired the conveyance rather than that of the account party. Accordingly, for risk-based capital purposes, the originating bank should convert the full amount of the standby or commitment to an on-balance-sheet credit-equivalent amount. The credit-equivalent amount of the portion of the credit that has not been conveyed is assigned to the risk category appropriate to the obligor, after giving effect to any collateral or guarantees. The portion that has been conveyed is assigned either to the same risk category as the obligor or to the risk category appropriate to the institution acquiring the participation, whichever category carries the lower risk weight.

Commitments to Make Off-Balance-Sheet Transactions

As specified in the instructions to the call report, a commitment to make a standby letter of credit is considered to be a standby letter of credit. Accordingly, such a commitment should be converted to an on-balance-sheet credit-equivalent amount at 100 percent if it is a commitment to make a financial standby letter of credit or 50 percent if it is a commitment to make a performance standby letter of credit.

A commitment to make a commitment is treated as a single commitment whose maturity is the combined maturity of the two commitments. For example, a 6-month commitment to make a 1-year commitment is considered to be a single 18-month commitment. Since the maturity is over one year, such a commitment would receive the 50 percent conversion factor appropriate to long-term commitments, rather than the zero percent conversion factor that would be accorded to separate unrelated short-term commitments of six months and one year.

A commitment to make a commercial letter of credit may be treated either as a commitment or as a commercial letter of credit, whichever results in the lower conversion factor. Normally, this would mean that a commitment under one year to make a commercial letter of credit would be treated as a commitment and converted at zero percent, while a similar commitment of over one year would be treated as a commercial letter of credit and converted at 20 percent.

If a commitment facility is structured so that it can be drawn down in several forms, such as a standby letter of credit, a loan, or a commercial letter of credit, the entire facility should be treated as a commitment to extend credit in the form that incurs the highest capital charge. Thus, if a facility could be drawn down in any of the three forms just cited, the entire facility would be treated as a commitment to issue a standby letter of credit and would be converted at 100 percent, rather than treated as a commitment to make a loan or commercial letter of credit, which would have a lower conversion factor.

Unused Commitments

Unused commitments, including underwriting commitments, and commercial and consumer credit commitments that have an original maturity of one year or less are converted at zero percent. Facilities that are unconditionally cancellable (without cause) at any time by the bank are not deemed to be commitments, provided that a separate credit decision is made before each drawing under the facility.

Unused commitments that have an original maturity of over one year are converted at 50 percent. For this purpose, original maturity is defined as the length of time between the date the commitment is issued and the earliest date on which (1) the bank has the permanent ability to, at its option, unconditionally cancel[18] (without cause) the commitment,[19] and (2) the bank is scheduled to (and as a normal practice actually does) review the facility to determine whether the unused commitment should be extended. (It should be noted that the term of any loan advances that can be made under a commitment is not taken into account in determining the commitment's maturity.) Under this definition of original maturity, commitments with a nominal original maturity of more than one year can be treated as having a maturity of one year or less for risk-based capital purposes only if the issuing bank (1) has full and unconditional discretion to cancel the commitment without cause and without notice on each and every day after the first year and (2) conducts at least annually a formal credit review of the commitment, including an assessment of the credit quality of the obligor.

It should be noted that a bank is not deemed able to unconditionally cancel a commitment if it is required to give, or is presumed to be required to give, any advance notice of cancellation. Accordingly, so-called evergreen commitments, which require the bank to give advance notice of cancellation to the obligor or which permit the commitment to roll over automatically (that is, on the same terms and without a thorough credit review) unless the bank gives notice otherwise, are not unconditionally cancellable. Thus, any such commitment whose term from date of issuance could exceed one year is subject to the 50 percent conversion factor.

A bank may issue a commitment that expires within one year with the understanding that the commitment will be renewed upon expiration subject to a thorough credit review of the obligor. Such a commitment may be converted at zero percent only if (1) the renegotiation process is carried out in good faith, involves a full credit assessment of the obligor, and allows the bank flexibility to alter the terms and conditions of the new commitment; (2) the bank has absolute discretion to decline renewal or extension of the commitment; and (3) the renegotiated commitment expires within 12 months from the time it is made. Some commitments contain unusual renegotiation arrangements that would give the borrower a considerable amount of advance notice that a commitment would not be renewed. Provisions of this kind can have the effect of creating a rolling commitment arrangement that should be treated for risk-based capital purposes as a long-term commitment and should therefore be converted to a credit-equivalent amount at 50 percent. Normally, the renegotiation process should take no more than six to eight weeks, and in many cases it should take a shorter period of time. The renegotiation period should immediately precede the expiration date of the commitment and should be reasonably short and appropriate to the complexity of the transaction. The reasons for provisions in a commitment arrangement that would appear to allow for a protracted renegotiation period should be thoroughly documented by the bank and reviewed by the examiner.

As mentioned above, a commitment to make a commitment is treated as a single commitment whose maturity is the combined maturity of the two commitments. Although such commitments whose combined maturity is in excess of one year are generally considered long-term, if the customer has a bona fide business reason for requesting a new commitment to supersede the unexpired one, such as an unanticipated increase in the volume of business or a change in the customer's cash flow and credit needs, then the commitment would not automatically be considered long-term. However, if the bank exhibits a

18. A bank's option to cancel a commitment under a material adverse change clause is not considered to be an option to unconditionally cancel a commitment.

19. In the case of consumer home equity or mortgage lines of credit secured by liens on one- to four-family residential properties, the bank is deemed able to unconditionally cancel the commitment for the purpose of this criterion if, at its option, it can prohibit additional extensions of credit, reduce the credit lines, and terminate the commitment to the full extent permitted by relevant federal law.

pattern and practice of extending short-term commitments before their expiration—either for one customer or more broadly within the bank—then such extended commitments would be viewed as long-term. This treatment generally would apply to all commitments, including traditional commercial paper liquidity lines.

Of course, other criteria for determining whether a facility is short- or long-term include the actual level of risk associated with the transaction and whether that level of risk is more characteristic of a long-term (as opposed to a short-term) commitment. Liquidity facilities issued in connection with asset-backed commercial paper programs, when judged by these criteria, seem to possess risk characteristics that are less than those associated with typical short-term commercial loan commitments. One of these characteristics is the short-term nature of the securitized receivables. The receivables that are securitized in asset-backed commercial paper programs tend to be of very short average maturity—often in the range of 30 to 60 days. Advances under asset-backed commercial paper liquidity facilities generally are very rare, and when such advances are made, it is against pools of very high-quality, performing receivables that would generally liquidate very quickly. These facilities are further protected against credit risk by significant amounts of overcollateralization as well as other credit enhancements.

A series of short-term commitments would generally be treated as a single commitment whose original maturity is the combined maturities of the individual commitments in the series. Also, a commitment may be structured to be drawn down in a number of tranches, some exercisable in one year or less and others exercisable in over one year. The full amount of such a commitment is deemed to be over one year and converted at 50 percent. Some long-term commitments may permit the customer to draw down varying amounts at different times to accommodate, for example, seasonal borrowing needs. The 50 percent conversion factor should be applied to the maximum amount that could be drawn down under such commitments.

Credit-Equivalent Computations for Derivative Contracts

Applicable derivative contracts. Credit-equivalent amounts are computed for each of the following off-balance-sheet contracts:

- interest-rate contracts
  - — single-currency interest-rate swaps
  - — basis swaps
  - — forward rate agreements
  - — interest-rate options purchased (including caps, collars, and floors purchased)
  - — any other instrument linked to interest rates that gives rise to similar credit risks (including when-issued securities and forward deposits accepted)
- exchange-rate contracts
  - — cross-currency interest-rate swaps
  - — forward foreign-exchange-rate contracts
  - — currency options purchased
  - — any other instrument linked to exchange rates that gives rise to similar credit risks
- equity derivative contracts
  - — equity-linked swaps
  - — equity-linked options purchased
  - — forward equity-linked contracts
  - — any other instrument linked to equities that gives rise to similar credit risks
- commodity (including precious metal) derivative contracts
  - — commodity-linked swaps
  - — commodity-linked options purchased
  - — forward commodity-linked contracts
  - — any other instrument linked to commodities that gives rise to similar credit risks
- credit derivatives
  - — credit-default swaps
  - — total-rate-of-return swaps
  - — other types of credit derivatives

Exceptions. Exchange-rate contracts with an original maturity of 14 or fewer calendar days and derivative contracts traded on exchanges that require daily receipt and payment of cash variation margin may be excluded from the risk-based ratio calculation. Gold contracts are accorded the same treatment as exchange-rate contracts except that gold contracts with an original maturity of 14 or fewer calendar days are included in the risk-based ratio calculation. Over-the-counter options purchased are included and treated in the same way as other derivative contracts.

Calculation of credit-equivalent amounts. The credit-equivalent amount of a derivative contract (excluding credit derivatives) that is not subject to a qualifying bilateral netting contract is equal to the sum of—

1. the current exposure (sometimes referred to

as the replacement cost) of the contract and
2. an estimate of the potential future credit exposure of the contract.

The current exposure is determined by the mark-to-market value of the contract. If the mark-to-market value is positive, then the current exposure is equal to that mark-to-market value. If the mark-to-market value is zero or negative, then the current exposure is zero. Mark-to-market values are measured in dollars, regardless of the currency or currencies specified in the contract, and should reflect changes in the underlying rates, prices, and indexes, as well as in counterparty credit quality.

The potential future credit exposure of a contract, including a contract with a negative mark-to-market value, is estimated by multiplying the notional principal amount of the contract by a credit-conversion factor. Banks should use, subject to examiner review, the effective rather than the apparent or stated notional amount in this calculation. The conversion factors (in percent) are in table 1. The Board has noted that these conversion factors, which are based on observed volatilities of the particular types of instruments, are subject to review and modification in light of changing volatilities or market conditions.

Table 1—Conversion-Factor Matrix

Remaining maturity	*Interest rate*	*Foreign-exchange rate and gold*	*Equity*	*Precious metals (excluding gold)*	*Other commodity (excluding precious metals*
One year or less	0.0	1.0	6.0	7.0	10.0
Over one to five years	0.5	5.0	8.0	7.0	12.0
Over five years	1.5	7.5	10.0	8.0	15.0

For a contract that is structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the market value of the contract is zero, the remaining maturity is equal to the time until the next reset date. Such resetting interest-rate contracts must have a minimum conversion factor of 0.5 percent.

For a contract with multiple exchanges of principal, the conversion factor is multiplied by the number of remaining payments in the contract. A derivative contract not included in the definitions of interest-rate, exchange-rate, equity, or commodity contracts is included in the risk-based capital calculation and is subject to the same conversion factors as a commodity, excluding precious metals.

No potential future credit exposure is calculated for a single-currency interest-rate swap in which payments are made based on two floating-rate indexes, so-called floating/floating or basis swaps. The credit exposure on these contracts is evaluated solely on the basis of their mark-to-market values.

Avoidance of double counting. In certain cases, credit exposures arising from derivative contracts may be reflected, in part, on the balance sheet. To avoid double counting these exposures in the assessment of capital adequacy and, perhaps, assigning inappropriate risk weights, examiners may need to exclude counterparty credit exposures arising from the derivative instruments covered by the guidelines from balance-sheet assets when calculating a bank's risk-based capital ratios. This exclusion will eliminate the possibility that an organization could be required to hold capital against both an off-balance-sheet and on-balance-sheet amount for the same item. This treatment is not accorded to margin accounts and accrued receivables related to interest-rate and exchange-rate contracts.

The aggregate on-balance-sheet amount excluded from the risk-based capital calculation is equal to the lower of—

1. each contract's positive on-balance-sheet amount or

2. its positive market value included in the off-balance-sheet risk-based capital calculation.

For example, a forward contract that is marked to market will have the same market value on the balance sheet as is used in calculating the credit-equivalent amount for off-balance-sheet exposures under the guidelines. Therefore, the on-balance-sheet amount is not included in the risk-based capital calculation. When either the contract's on-balance-sheet amount or its market value is negative or zero, no deduction from on-balance-sheet items is necessary for that contract.

If the positive on-balance-sheet asset amount exceeds the contract's market value, the excess (up to the amount of the on-balance-sheet asset) should be included in the appropriate risk-weight category. For example, a purchased option will often have an on-balance-sheet amount equal to the fee paid until the option expires. If that amount exceeds market value, the excess of carrying value over market value would be included in the appropriate risk-weight category for purposes of the on-balance-sheet portion of the calculation.

Netting of swaps and similar contracts. Netting refers to the offsetting of positive and negative mark-to-market values in the determination of a current exposure to be used in the calculation of a credit-equivalent amount. Any legally enforceable form of bilateral netting (that is, netting with a single counterparty) of derivative contracts is recognized for purposes of calculating the credit-equivalent amount provided that—

- the netting is accomplished under a written netting contract that creates a single legal obligation, covering all included individual contracts, with the effect that the organization would have a claim to receive, or an obligation to receive or pay, only the net amount of the sum of the positive and negative mark-to-market values on included individual contracts if a counterparty, or a counterparty to whom the contract has been validly assigned, fails to perform due to default, insolvency, liquidation, or similar circumstances;
- the bank obtains written and reasoned legal opinions that in the event of a legal challenge—including one resulting from default, insolvency, liquidation, or similar circumstances—the relevant court and administrative authorities would find the bank's exposure to be such a net amount under—
  - — the law of the jurisdiction in which the counterparty is chartered or the equivalent location in the case of noncorporate entities, and if a branch of the counterparty is involved, then also under the law of the jurisdiction in which the branch is located;
  - — the law that governs the individual contracts covered by the netting contract; and
  - — the law that governs the netting contract;
- the bank establishes and maintains procedures to ensure that the legal characteristics of netting contracts are kept under review in light of possible changes in relevant law; and
- the bank maintains documentation in its files that is adequate to support the netting of rate contracts, including a copy of the bilateral netting contract and necessary legal opinions.

A contract containing a walkaway clause is not eligible for netting for purposes of calculating the credit-equivalent amount.

By netting individual contracts for the purpose of calculating credit-equivalent amounts of derivative contracts, a bank represents that it has met the requirements of the risk-based measure of the capital adequacy guidelines for bank holding companies and that all the appropriate documents are in the organization's files and available for inspection by the Federal Reserve. The Federal Reserve may determine that a bank's files are inadequate or that a netting contract, or any of its underlying individual contracts, may not be legally enforceable. If such a determination is made, the netting contract may be disqualified from recognition for risk-based capital purposes or underlying individual contracts may be treated as though they are not subject to the netting contract.

The credit-equivalent amount of contracts that are subject to a qualifying bilateral netting contract is calculated by adding—

1. the current exposure of the netting contract (net current exposure) and
2. the sum of the estimates of the potential future credit exposures on all individual contracts subject to the netting contract (gross potential future exposure) adjusted to reflect the effects of the netting contract.

The net current exposure of the netting con-

tract is determined by summing all positive and negative mark-to-market values of the individual contracts included in the netting contract. If the net sum of the mark-to-market values is positive, then the current exposure of the netting contract is equal to that sum. If the net sum of the mark-to-market values is zero or negative, then the current exposure of the netting contract is zero. The Federal Reserve may determine that a netting contract qualifies for risk-based capital netting treatment even though certain individual contracts may not qualify. In these instances, the nonqualifying contracts should be treated as individual contracts that are not subject to the netting contract.

Gross potential future exposure (A_{gross}) is calculated by summing the estimates of potential future exposure for each individual contract subject to the qualifying bilateral netting contract. The effects of the bilateral netting contract on the gross potential future exposure are recognized through the application of a formula that results in an adjusted add-on amount (A_{net}). The formula, which employs the ratio of net current exposure to gross current exposure (NGR), is expressed as—

$$A_{net} = (0.4 \times A_{gross}) + 0.6(NGR \times A_{gross})$$

The NGR may be calculated in accordance with either the counterparty-by-counterparty approach or the aggregate approach. Under the counterparty-by-counterparty approach, the NGR is the ratio of the net current exposure for a netting contract to the gross current exposure of the netting contract. The gross current exposure is the sum of the current exposures of all individual contracts subject to the netting contract. Net negative mark-to-market values for individual netting contracts with the same counterparty may not be used to offset net positive mark-to-market values for other netting contracts with the same counterparty.

Under the aggregate approach, the NGR is the ratio of the sum of all the net current exposures for qualifying bilateral netting contracts to the sum of all the gross current exposures for those netting contracts (each gross current exposure is calculated in the same manner as in the counterparty-by-counterparty approach). Net negative mark-to-market values for individual counterparties may not be used to offset net positive current exposures for other counterparties.

A bank must consistently use either the counterparty-by-counterparty approach or the aggregate approach to calculate the NGR. Regardless of the approach used, the NGR should be applied individually to each qualifying bilateral netting contract to determine the adjusted add-on for that netting contract.

In the event a netting contract covers contracts that are normally excluded from the risk-based ratio calculation—for example, exchange-rate contracts with an original maturity of 14 or fewer calendar days or instruments traded on exchanges that require daily payment and receipt of cash variation margin—an institution may elect to either include or exclude all mark-to-market values of such contracts when determining net current exposure, provided the method chosen is applied consistently.

Examiners should review the netting of off-balance-sheet derivative contracts used by banks when calculating or verifying risk-based capital ratios to ensure that the positions of such contracts are reported gross unless the net positions of those contracts reflect netting arrangements that comply with the netting requirements listed previously.

Credit Derivatives

Credit derivatives are off-balance-sheet arrangements that allow one party (the beneficiary) to transfer credit risk of a reference asset—which the beneficiary may or may not own—to another party (the guarantor).[20] Many banks increasingly use these instruments to manage their overall credit-risk exposure. In general, credit derivatives have three distinguishing features:

1. the transfer of the credit risk associated with a reference asset through contingent payments based on events of default and, usually, the prices of instruments before, at, and shortly after default (reference assets are most often traded sovereign and corporate debt instruments or syndicated bank loans)
2. the periodic exchange of payments or the payment of a premium rather than the pay-

20. Credit derivatives generally fall into three basic transaction types: total-rate-of-return swaps, credit-default swaps, and credit-default or credit-linked notes. For a more in-depth description of these types of credit derivatives, see the Federal Reserve's *Trading and Capital-Markets Activities Manual*, section 4350.1, "Credit Derivatives," as well as supervisory letter SR-96-17.

ment of fees customary with other off-balance-sheet credit products, such as letters of credit
3. the use of an International Swap Derivatives Association (ISDA) master agreement and the legal format of a derivatives contract

For risk-based capital purposes, total-rate-of-return swaps and credit-default swaps generally should be treated as off-balance-sheet direct credit substitutes.[21] The notional amount of a contract should be converted at 100 percent to determine the credit-equivalent amount to be included in the risk-weighted assets of a guarantor.[22] A bank that provides a guarantee through a credit derivative transaction should assign its credit exposure to the risk category appropriate to the obligor of the reference asset or any collateral. On the other hand, a bank that owns the underlying asset upon which effective credit protection has been acquired through a credit derivative may, under certain circumstances, assign the unamortized portion of the underlying asset to the risk category appropriate to the guarantor (for example, the 20 percent risk category if the guarantor is an OECD bank).

Whether the credit derivative is considered an eligible guarantee for purposes of risk-based capital depends upon the actual degree of credit protection. The amount of credit protection actually provided by a credit derivative may be limited depending upon the terms of the arrangement. In this regard, for example, a relatively restrictive definition of a default event or a materiality threshold that requires a comparably high percentage of loss to occur before the guarantor is obliged to pay could effectively limit the amount of credit risk actually transferred in the transaction. If the terms of the credit derivative arrangement significantly limit the degree of risk transference, then the beneficiary bank cannot reduce the risk weight of the ''protected'' asset to that of the guarantor bank. On the other hand, even if the transfer of credit risk is limited, a bank providing limited credit protection through a credit derivative should hold appropriate capital against the underlying exposure while it is exposed to the credit risk of the reference asset.

A bank providing a guarantee through a credit derivative may mitigate the credit risk associated with the transaction by entering into an offsetting credit derivative with another counterparty—a so-called ''back-to-back'' position. A bank that has entered into such a position may treat the first credit derivative as being guaranteed by the offsetting transaction for risk-based capital purposes. Accordingly, the notional amount of the first credit derivative may be assigned to the risk category appropriate to the counterparty providing credit protection through the offsetting credit derivative arrangement (for example, the 20 percent risk category if the counterparty is an OECD bank).

In some instances, the reference asset in the credit derivative transaction may not be identical to the underlying asset for which the beneficiary has acquired credit protection. For example, a credit derivative used to offset the credit exposure of a loan to a corporate customer may use as the reference asset a publicly traded corporate bond of that customer, with the credit quality of the bond serving as a proxy for the on-balance-sheet loan. In such a case, the underlying asset would still generally be considered guaranteed for capital purposes as long as both the underlying asset and the reference asset are obligations of the same legal entity and have the same level of seniority in bankruptcy. In addition, a bank offsetting credit exposure in this manner would be obligated to demonstrate to examiners that (1) there is a high degree of correlation between the two instruments; (2) the reference instrument is a reasonable and sufficiently liquid proxy for the underlying asset so that the instruments can be reasonably expected to behave in a similar manner in the event of default; and (3) at a minimum, the reference asset and underlying asset are subject to mutual cross-default provisions. A bank that uses a credit derivative which is based on a reference asset that differs from the protected underlying asset must document the credit derivative being used to offset credit risk and must link it directly to the asset or assets whose credit risk the transaction is designed to offset. The documentation and the effectiveness of the credit derivative transaction are subject to examiner review.

21. Unlike total-rate-of-return swaps and credit-default swaps, credit-linked notes are on-balance-sheet assets or liabilities. A guarantor bank should assign the on-balance-sheet amount of the credit-linked note to the risk category appropriate to either the issuer or the reference asset, whichever is higher. For a beneficiary bank, cash consideration received in the sale of the note may be considered as collateral for risk-based capital purposes.

22. A guarantor bank that has made cash payments representing depreciation on reference assets may deduct such payments from the notional amount when computing credit-equivalent amounts for capital purposes.

A bank providing credit protection through such an arrangement must hold capital against the risk exposures that are assumed.

Some credit derivative transactions provide credit protection for a group or basket of reference assets and call for the guarantor to absorb losses on only the first asset in the group that defaults. Once the first asset in the group defaults, the credit protection for the remaining assets covered by the credit derivative ceases. If examiners determine that the credit risk for the basket of assets has effectively been transferred to the guarantor and the beneficiary banking organization owns all of the reference assets included in the basket, then the beneficiary may assign the asset with the smallest dollar amount in the group—if less than or equal to the notional amount of the credit derivative—to the risk category appropriate to the guarantor. Conversely, a bank extending credit protection through a credit derivative on a basket of assets must assign the contract's notional amount of credit exposure to the highest risk category appropriate to the assets in the basket.

In addition to holding capital against credit risk, a bank that is subject to the market-risk rule (see ''Market-Risk Measure'' above) must hold capital against market risk for credit derivatives held in its trading account. (For a description of market-risk capital requirements for credit derivatives, see supervisory letter SR-97-18.)

Using Credit Derivatives to Synthetically Replicate Collateralized Loan Obligations

Credit derivatives can be used to synthetically replicate collateralized loan obligations (CLOs). Banking organizations (BOs) can use CLOs and their synthetic variants to manage their balance sheets and, in some instances, transfer credit risk to the capital markets. Such transactions allow economic capital to be more efficiently allocated, resulting in, among other things, improved shareholders' returns.

The issue for BOs is how synthetic CLOs should be treated under the risk-based and leverage capital guidelines.[23] Supervisors and examiners need to fully understand these complex structures, and identify the relative degree of transference and retention of the securitized portfolio's credit risk. They must determine whether the institution's regulatory capital is adequate given the retained credit exposures.

A CLO is an asset-backed security that is usually supported by a variety of assets, including whole commercial loans, revolving credit facilities, letters of credit, banker's acceptances, or other asset-backed securities. In a typical CLO transaction, the sponsoring banking organization (SBO) transfers the loans and other assets to a bankruptcy-remote special-purpose vehicle (SPV), which then issues asset-backed securities consisting of one or more classes of debt. This type of transaction represents a so-called ''cash-flow CLO.'' It enables the sponsoring institution (SI) to reduce its leverage and risk-based capital requirements, improve its liquidity, and manage credit concentrations.

The first synthetic CLO (issued in 1997) used credit-linked notes (CLNs).[24] Rather than transferring assets to the SPV, the sponsoring bank issued CLNs to the SPV, individually referencing the payment obligation of a particular company or ''reference obligor.'' The notional amount of the CLNs issued equaled the dollar amount of the reference assets the sponsor was hedging on its balance sheet. Other structures have evolved that use credit-default swaps to transfer credit risk and create different levels of risk exposure, but that hedge only a portion of the notional amount of the overall reference portfolio.[25]

Traditional CLO structures usually transfer assets into the SPV. In synthetic securitizations, the underlying exposures that make up the reference portfolio remain in the institution's banking book.[26] The credit risk is transferred into the SPV through credit-default swaps or CLNs. The institution is thus able to maintain client confidentiality and avoid sensitive client-relationship issues that arise from loan-transfer-notification requirements, loan-

23. See SR-99-32 and its November 15, 1999, attachment, an FRB-OCC capital interpretation on synthetic CLOs.

24. CLNs are obligations whose principal repayment is conditioned upon the performance of a referenced asset or portfolio. The assets' performance may be based on a variety of measures, such as movements in price or credit spread, or the occurrence of default.

25. A credit-default swap is similar to a financial standby letter of credit in that the institution writing the swap provides, for a fee, credit protection against credit losses associated with a default on a specified reference asset or pool of assets.

26. ''Banking book'' refers to nontrading accounts. See the definition of ''trading accounts'' in the glossary for the instructions to the bank call report.

assignment provisions, and loan-participation restrictions.

Corporate credits are assigned to the 100 percent risk-weighted asset category. In the case of high-quality investment-grade corporate exposures, the associated 8 percent capital requirement may exceed the economic capital that the sponsoring bank sets aside to cover the credit risk of the transaction. Therefore, one of the apparent motivations behind CLOs and other securitizations is to more closely align the SI's regulatory capital requirements with the economic capital required by the market.

Synthetic CLOs can raise questions about their capital treatment when calculating the risk-based and leverage capital ratios. Capital treatments for three synthetic CLO transactions follow. They are discussed from the perspective of the investors and the SBOs.

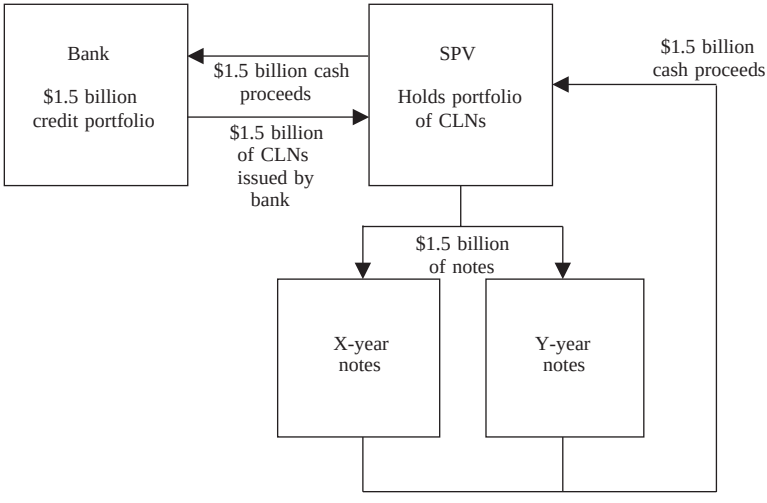
Transaction 1—Entire Notional Amount of the Reference Portfolio Is Hedged

In the first type of synthetic securitization, the SBO, through a synthetic CLO, hedges the entire notional amount of a reference asset portfolio. An SPV acquires the credit risk on a reference portfolio by purchasing CLNs issued by the SBO. The SPV funds the purchase of the CLNs by issuing a series of notes in several tranches to third-party investors. The investor notes are in effect collateralized by the CLNs. Each CLN represents one obligor and the bank's credit-risk exposure to that obligor, which could take the form of bonds, commitments, loans, and counterparty exposures. Since the noteholders are exposed to the full amount of credit risk associated with the individual reference obligors, all of the credit risk of the reference portfolio is shifted from the sponsoring bank to the capital markets. The dollar amount of notes issued to investors equals the notional amount of the reference portfolio. In the example shown in figure 1, this amount is $1.5 billion.

If any obligor linked to a CLN in the SPV defaults, the SI will call the individual CLN and redeem it based on the repayment terms specified in the note agreement. The term of each CLN is set so that the credit exposure (to which it is linked) matures before the maturity of the CLN, which ensures that the CLN will be in place for the full term of the exposure to which it is linked.

An investor in the notes issued by the SPV is exposed to the risk of default of the underlying reference assets, as well as to the risk that the SI will not repay principal at the maturity of the notes. Because of the linkage between the credit quality of the SI and the issued notes, a downgrade of the sponsor's credit rating most likely will result in the notes also being downgraded. Thus, a BO investing in this type of synthetic CLO should assign the notes to the higher of the risk categories appropriate to the underlying reference assets or the issuing entity.

Figure 1—Transaction 1



For purposes of risk-based capital, the SBOs may treat the cash proceeds from the sale of CLNs that provide protection against underlying reference assets as cash collateralizing these assets.[27] This treatment would permit the reference assets, if carried on the SI's books, to be assigned to the zero percent risk category to the extent that their notional amount is fully collateralized by cash. This treatment may be applied even if the cash collateral is transferred directly into the general operating funds of the institution and is not deposited in a segregated account. The synthetic CLO would not confer any benefits to the SBO for purposes of calculating its tier 1 leverage ratio because the reference assets remain on the organization's balance sheet.

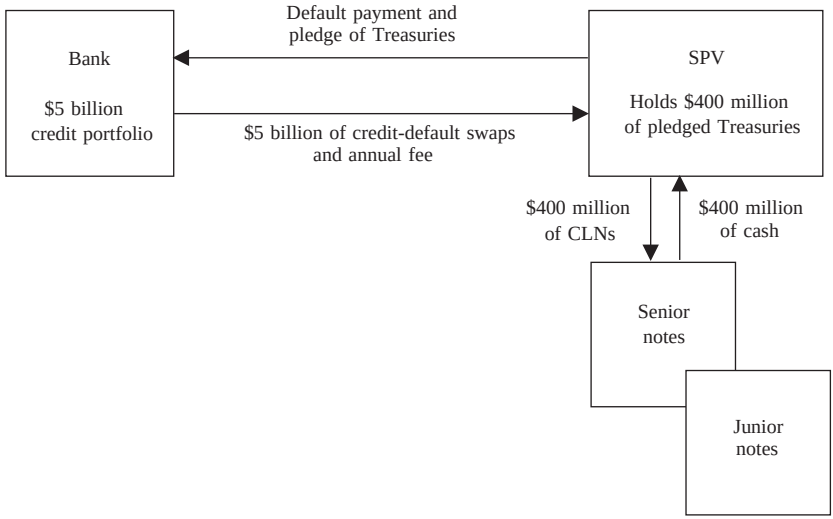
27. The CLNs should not contain terms that would significantly limit the credit protection provided against the underlying reference assets, for example, a materiality threshold that requires a relatively high percentage of loss to occur before CLN payments are adversely affected, or a structuring of CLN post-default payments that does not adequately pass through credit-related losses on the reference assets to investors in the CLNs.

Transaction 2—High-Quality, Senior Risk Position in the Reference Portfolio Is Retained

In the second type of synthetic CLO transaction, the SBO hedges a portion of the reference portfolio and retains a high-quality, senior risk position that absorbs only those credit losses in excess of the junior-loss positions. In some recent synthetic CLOs, the SBO has used a combination of credit-default swaps and CLNs to essentially transfer to the capital markets the credit risk of a designated portfolio of the organization's credit exposures. Such a transaction allows the SI to allocate economic capital more efficiently and to significantly reduce its regulatory capital requirements.

In the structure illustrated in figure 2, the SBO purchases default protection from an SPV for a specifically identified portfolio of banking-book credit exposures, which may include letters of credit and loan commitments. The credit risk on the identified reference portfolio (which continues to remain in the sponsor's banking book) is transferred to the SPV through the use of credit-default swaps. In exchange for the credit protection, the SI pays the SPV an annual fee. The default swaps on each of the obligors in the reference portfolio are structured to pay the average default losses on all

Figure 2—Transaction 2



senior unsecured obligations of defaulted borrowers.

To support its guarantee, the SPV sells CLNs to investors and uses the cash proceeds to purchase U.S. government Treasury notes. The SPV then pledges the Treasuries to the SBO to cover any default losses.[28] The CLNs are often issued in multiple tranches of differing seniority and in an aggregate amount that is significantly less than the notional amount of the reference portfolio. The amount of notes issued typically is set at a level sufficient to cover some multiple of expected losses, but well below the notional amount of the reference portfolio being hedged.

There may be several levels of loss in this type of synthetic securitization. The first-loss position may consist of a small cash reserve, sufficient to cover expected losses. The cash reserve accumulates over a period of years and is funded from the excess of the SPV's income (that is, the yield on the Treasury securities plus the credit-default-swap fee) over the interest paid to investors on the notes. The investors in the SPV assume a second-loss position through their investment in the SPV's senior and junior notes, which tend to be rated AAA and BB, respectively. Finally, the SBO retains a high-quality, senior risk position that would absorb any credit losses in the reference portfolio that exceed the first- and second-loss positions.

Typically, no default payments are made until the maturity of the overall transaction, regardless of when a reference obligor defaults. While operationally important to the SBO, this feature has the effect of ignoring the time value of money. Thus, the Federal Reserve expects that when the reference obligor defaults under the terms of the credit derivative and when the reference asset falls significantly in value, the SBO should, in accordance with generally accepted accounting principles, make appropriate adjustments in its regulatory reports to reflect the estimated loss that takes into account the time value of money.

For risk-based capital purposes, BOs investing in the notes must assign them to the risk weight appropriate to the underlying reference assets.[29] The SBO for such transactions must include in its risk-weighted assets its retained senior exposure in the reference portfolio, to the extent these underlying assets are held in its banking book. The portion of the reference portfolio that is collateralized by the pledged Treasury securities may be assigned a zero percent risk weight. Unless the SBO meets the stringent minimum conditions for transaction 2 that are outlined in the minimum conditions paragraphs below, the remainder of the portfolio should be risk weighted according to the obligor of the exposures.

When the SI has virtually eliminated its credit-risk exposure to the reference portfolio through the issuance of CLNs, and when the other stringent minimum conditions are met, the institution may assign the uncollateralized portion of its retained senior position in the reference portfolio to the 20 percent risk weight. However, to the extent that the reference portfolio includes loans and other on-balance-sheet assets, an SBO involved in such a synthetic securitization would not realize any benefits in the determination of its leverage ratio.

In addition to the three stringent minimum conditions, the Federal Reserve may impose other requirements as it deems necessary to ensure that the SI has virtually eliminated all of its credit exposure. Furthermore, the Federal Reserve retains the discretion to increase the risk-based capital requirement assessed against the retained senior exposure in these structures, if the underlying asset pool deteriorates significantly.

Federal Reserve staff will make a case-by-case determination, based on a qualitative review, as to whether the senior retained portion of an SBO's synthetic securitization qualifies for the 20 percent risk weight. The SI must be able to demonstrate that virtually all the credit risk of the reference portfolio has been transferred from the banking book to the capital markets. As they do when BOs are engaging in more traditional securitization activities, examiners must carefully evaluate whether the institution is fully capable of assessing the credit risk it retains in its banking book and whether it is adequately capitalized given its residual risk exposure. The Federal Reserve will require the SBO to maintain higher levels of capital if it is not deemed to be adequately capitalized given the retained residual risks. In addition, an SI involved in synthetic securitizations must adequately disclose to the marketplace the effect of the transaction on its risk profile and capital adequacy.

28. The names of corporate obligors included in the reference portfolio may be disclosed to investors in the CLNs.

29. Under this type of transaction, if a structure exposes investing BOs to the creditworthiness of a substantive issuer, for example, the SI, then the investing institutions should assign the notes to the higher of the risk categories appropriate to the underlying reference assets or the SI.

The Federal Reserve may consider an SBO's failure to require the investors in the CLNs to absorb the credit losses that they contractually agreed to assume to be an unsafe and unsound banking practice. In addition, such a failure generally would constitute ''implicit recourse'' or support to the transaction, which would result in the SBO's losing preferential capital treatment on its retained senior position.

If an SBO of a synthetic securitization does not meet the stringent minimum conditions, it may still reduce the risk-based capital requirement on the senior risk position retained in the banking book by transferring the remaining credit risk to a third-party OECD bank through the use of a credit derivative. Provided the credit derivative transaction qualifies as a guarantee under the risk-based capital guidelines, the risk weight on the senior position may be reduced from 100 percent to 20 percent. Institutions may not enter into nonsubstantive transactions that transfer banking-book items into the trading account to obtain lower regulatory capital requirements.[30]

Minimum conditions. The following stringent minimum conditions are those that SIs must meet to use the synthetic securitization capital treatment for transaction 2. The Federal Reserve may impose additional requirements or conditions as deemed necessary to ascertain that the SBO has sufficiently isolated itself from the credit-risk exposure of the hedged reference portfolio.

- *Condition 1—Demonstration of transfer of virtually all of the risk to third parties.* Not all transactions structured as synthetic securitizations transfer the level of credit risk needed to receive the 20 percent risk weight on the retained senior position. To demonstrate that a transfer of virtually all of the risk has been achieved, institutions must—
  - — produce credible analyses indicating a transfer of virtually all of the credit risk to substantive third parties;
  - — ensure the absence of any early-amortization or other credit performance contingent clauses;[31]
  - — subject the transaction to market discipline through the issuance of a substantive amount of notes or securities to the capital markets;
  - — have notes or securities rated by a nationally recognized credit rating agency;
  - — structure a senior class of notes that receives the highest possible investment-grade rating, for example, AAA, from a nationally recognized credit rating agency;
  - — ensure that any first-loss position retained by the SI in the form of fees, reserves, or other credit enhancements—which effectively must be deducted from capital—is no greater than a reasonable estimate of expected losses on the reference portfolio; and
  - — ensure that the SI does not reassume any credit risk beyond the first-loss position through another credit derivative or any other means.
- *Condition 2—Demonstration of ability to evaluate remaining banking-book risk exposures and provide adequate capital support.* To ensure that the SI has adequate capital for the credit risk of its unhedged exposures, an institution is expected to have adequate systems that fully account for the effect of those transactions on its risk profiles and capital adequacy. In particular, its systems should be capable of fully differentiating the nature and quality of the risk exposures an institution transfers from the nature and quality of the risk exposures it retains. Specifically, to gain capital relief institutions are expected to—
  - — have a credible internal process for grading credit-risk exposures, including (1) adequate differentiation of risk among risk grades, (2) adequate controls to ensure the objectivity and consistency of the rating process, and (3) analysis or evidence supporting the accuracy or appropriateness of the risk-grading system;

30. For instance, a lower risk weight would not be applied to a nonsubstantive transaction in which the SI (1) enters into a credit derivative transaction to pass the credit risk of the senior retained portion held in its banking book to an OECD bank, and then (2) enters into a second credit derivative transaction with the same OECD bank, in which it reassumes into its trading account the credit risk initially transferred.

31. Early-amortization clauses may generally be defined as features that are designed to force a wind-down of a securitization program and rapid repayment of principal to asset-backed securities investors if the credit quality of the underlying asset pool deteriorates significantly.

— have a credible internal economic capital-assessment process that defines the institution to be adequately capitalized at an appropriate insolvency probability and that readjusts, as necessary, its internal economic capital requirements to take into account the effect of the synthetic securitization transaction. In addition, the process should employ a sufficiently long time horizon to allow necessary adjustments in the event of significant losses. The results of an exercise demonstrating that the organization is adequately capitalized after the securitization transaction must be presented for examiner review;
— evaluate the effect of the transaction on the nature and distribution of the nontransferred banking-book exposures. This analysis should include a comparison of the banking book's risk profile and economic capital requirements before and after the transaction, including the mix of exposures by risk grade and business or economic sector. The analysis should also identify any concentrations of credit risk and maturity mismatches. Additionally, the bank must adequately manage and control the forward credit exposure that arises from any maturity mismatch. The Federal Reserve retains the flexibility to require additional regulatory capital if the maturity mismatches are substantive enough to raise a supervisory concern. Moreover, as stated above, the SBO must demonstrate that it meets its internal economic capital requirement subsequent to the completion of the synthetic securitization; and
— perform rigorous and robust forward-looking stress testing on nontransferred exposures (remaining banking-book loans and commitments), transferred exposures, and exposures retained to facilitate transfers (credit enhancements). The stress tests must demonstrate that the level of credit enhancement is sufficient to protect the sponsoring bank from losses under scenarios appropriate to the specific transaction.

- *Condition 3—Provide adequate public disclosures of synthetic CLO transactions regarding their risk profile and capital adequacy.* In their 10-K and annual reports, SIs must adequately disclose to the marketplace the accounting, economic, and regulatory consequences of synthetic CLO transactions. In particular, institutions are expected to disclose—
  — the notional amount of loans and commitments involved in the transaction;
  — the amount of economic capital shed through the transaction;
  — the amount of reduction in risk-weighted assets and regulatory capital resulting from the transaction, both in dollar terms and in terms of the effect in basis points on the risk-based capital ratios; and
  — the effect of the transaction on the distribution and concentration of risk in the retained portfolio by risk grade and sector.

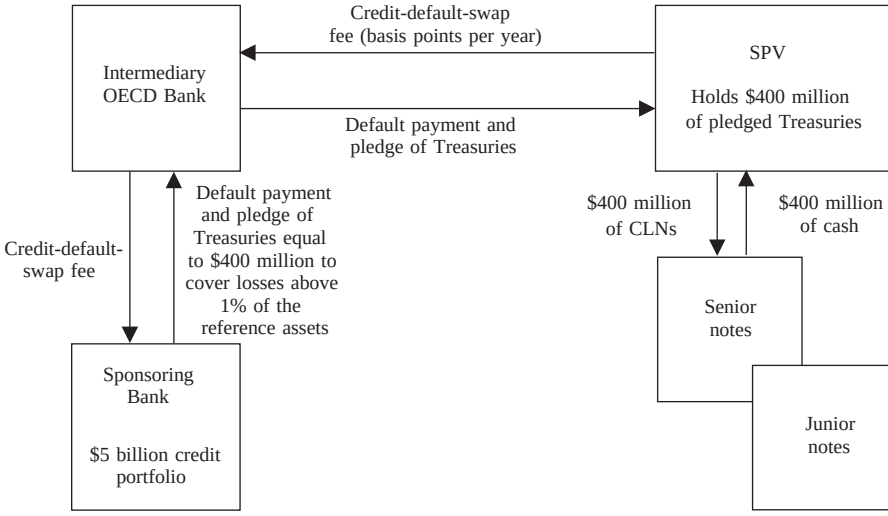
Transaction 3—Retention of a First-Loss Position

In the third type of synthetic transaction, the SBO may retain a subordinated position that absorbs first losses in a reference portfolio. The SBO retains the credit risk associated with a first-loss position and, through the use of credit-default swaps, passes the second- and senior-loss positions to a third-party entity, most often an OECD bank. The third-party entity, acting as an intermediary, enters into offsetting credit-default swaps with an SPV, thus transferring its credit risk associated with the second-loss position to the SPV.[32] The SPV then issues CLNs to the capital markets for a portion of the reference portfolio and purchases Treasury collateral to cover some multiple of expected losses on the underlying exposures. (See figure 3.)

Two alternative approaches could be used to determine how the SBO should treat the overall transaction for risk-based capital purposes. The first approach employs an analogy to the low-level capital rule for assets sold with recourse. Under this rule, a transfer of assets with recourse that contractually is limited to an amount less than the effective risk-based capital requirements for the transferred assets is assessed a total capital charge equal to the maximum amount of loss possible under the recourse obligation. If this rule was applied to an SBO retaining a 1 percent first-loss position on a synthetically securitized portfolio that would otherwise be assessed 8 percent capital, the SBO would be required to hold dollar-for-dollar capi-

32. Because the credit risk of the senior position is not transferred to the capital markets but remains with the intermediary bank, the SBO should ensure that its counterparty is of high credit quality, for example, at least investment grade.

Figure 3—Transaction 3



tal against the 1 percent first-loss risk position. The SI would not be assessed a capital charge against the second and senior risk positions.[33]

The second approach employs a literal reading of the capital guidelines to determine the SBO's risk-based capital charge. In this instance, the one percent *first-loss position* retained by the SI would be treated as a guarantee, that is, a direct credit substitute, which would be assessed an 8 percent capital charge against its face value of one percent. The *second-loss position*, which is collateralized by Treasury securities, would be viewed as fully collateralized and subject to a zero percent capital charge. The senior-loss position guaranteed by the intermediary bank would be assigned to the 20 percent risk category appropriate to claims guaranteed by OECD banks.[34]

It is possible that the second approach may result in a higher risk-based capital requirement than the dollar-for-dollar capital charge imposed by the first approach. This depends on whether the reference portfolio consists primarily of loans to private obligors or undrawn long-term commitments, which generally have an effective risk-based capital requirement that is one-half of the requirement for loans since such commitments are converted to an on-balance-sheet credit-equivalent amount using the 50 percent conversion factor. If the reference pool consists primarily of drawn loans to private obligors, then the capital requirement on the senior-loss position would be significantly higher than if the reference portfolio contained only undrawn long-term commitments. As a result, the capital charge for the overall transaction could be greater than the dollar-for-dollar capital requirement set forth in the first approach.

SIs will be required to hold capital against a retained first-loss position in a synthetic securitization equal to the higher of the two capital charges resulting from application of the first and second approaches, as discussed above. Further, although the SBO retains only the credit risk associated with the first-loss position, it still should continue to monitor all the underlying credit exposures of the reference portfolio to detect any changes in the credit-risk profile of the counterparties. This is important to ensure that the institution has adequate capital to protect against unexpected losses. Examiners should determine whether the sponsoring bank has the capability to assess and manage the retained risk

33. A BO that sponsors this type of synthetic securitization would not realize any benefits with respect to the determination of its leverage ratio since the reference assets remain on the SI's balance sheet.

34. If the intermediary is a BO, then it could place both sets of credit-default swaps in its trading account and, if subject to the Federal Reserve's' market-risk capital rules, use its general-market-risk model and, if approved, specific-risk model to calculate the appropriate risk-based capital requirement. If the specific-risk model has not been approved, then the SBO would be subject to the standardized specific-risk capital charge.

in its credit portfolio after the synthetic securitization is completed. For risk-based capital purposes, BOs investing in the notes must assign them to the risk weight appropriate to the underlying reference assets.[35]

Overall Assessment of Capital Adequacy

The following factors should be taken into account in assessing the overall capital adequacy of a bank.

Capital Ratios

Capital ratios should be compared with regulatory minimums and with peer-group averages. Banks are expected to have a minimum total risk-based capital ratio of 8 percent. However, because risk-based capital does not take explicit account of the quality of individual asset portfolios or the range of other types of risks to which banks may be exposed, such as interest-rate, liquidity, market, or operational risks, banks are generally expected to operate with capital positions above the minimum ratios. Institutions with high or inordinate levels of risk are also expected to maintain capital well above the minimum levels.

The minimum tier 1 leverage ratio is 3 percent. However, an institution operating at or near these levels is expected to have well-diversified risk, including no undue interest-rate risk exposure, excellent asset quality, high liquidity, and good earnings, and to generally be considered a strong banking organization, rated composite 1 under the CAMELS rating system of banks. For all but the most highly rated banks meeting the conditions above, the minimum tier 1 leverage ratio is 3 percent plus an additional cushion of at least 100 to 200 basis points.

Impact of Management

Strategic planning. One of management's most important functions is to lead the organization by designing, implementing, and supporting an effective strategic plan. Strategic planning is a long-term approach to integrating asset deployment, funding sources, capital formation, management, marketing, operations, and information systems to achieve success. Strategic planning helps the organization more effectively anticipate and adapt to change. Management must also ensure that planning information as well as corporate goals and objectives are effectively communicated throughout the organization. Effective strategic planning allows the institution to be more proactive than reactive in shaping its own future. The strategic plan should clearly outline the bank's capital base, anticipated capital expenditures, desirable capital level, and external capital sources. Each of these areas should be evaluated in consideration of the degree and type of risk that management and the board of directors are willing to accept.

Growth. Capital is necessary to support a bank's growth; however, it is the imposition of required capital ratios that controls growth. Because a bank has to maintain a minimum ratio of capital to assets, it will only be able to grow so fast. For example, a rapid growth in a bank's loan portfolio may be a cause of concern, for it could indicate that a bank is altering its risk profile by reducing its underwriting standards.

Dividends. Examiners should review historical and planned cash dividend payout ratios to determine whether dividend payments are impairing capital adequacy.[36] Excessive dividend payouts may result from several sources:

- If the bank is owned by a holding company, the holding company may be requiring excessive dividend payments from the bank to fund the holding company's debt-repayment program, expansion goals, or other cash needs.
- The bank's board of directors may be under pressure from individual shareholders to provide funds to repay bank stock debt or to use for other purposes.
- Dividends may be paid or promised to support a proposed equity offering.

Access to additional capital. Banks that do not generate sufficient capital internally may require

35. Under this type of transaction, if a structure exposes investing BOs to the creditworthiness of a substantive issuer, for example, the SI, then the investing institutions should assign the notes to the higher of the risk categories appropriate to the underlying reference assets or the SI.

36. See also "Dividends," section 4070.1.

external sources of capital. Large, independent institutions may solicit additional funding from the capital markets. Smaller institutions may rely on a bank holding company or a principal shareholder or control group to provide additional funds, or on the issuance of new capital instruments to existing or new investors. Current shareholders may resist efforts to obtain additional capital by issuing new capital instruments because of the diluting effect of the new capital. In deciding whether to approve obtaining additional capital in this manner, shareholders must weigh the dilution against the possibility that, without the additional funds, the institution may fail.

Under Federal Reserve policy, a bank holding company is expected to serve as a source of strength to its subsidiary banks. A bank holding company can fulfill this obligation by having enough liquidity to inject funds into the bank or by having access to the same sources of additional capital, that is, current or existing shareholders, as outlined above.

Financial Considerations

Capital levels and ratios should be evaluated in view of the bank's overall financial condition including the following areas.

Asset quality. The final supervisory judgment on a bank's capital adequacy may differ significantly from conclusions that may be drawn solely from the level of a bank's risk-based capital ratio. Generally, the main reason for this difference is the evaluation of asset quality. Final supervisory judgment of a bank's capital adequacy should take into account examination findings, particularly those on the severity of problem and classified assets and investment or loan portfolio concentrations, as well as on the adequacy of the bank's allowance for loan and lease losses.

Balance-sheet composition. A bank whose earning assets are not diversified or whose credit culture is more risk-tolerant is generally expected to operate with higher capital levels than a similar-sized institution with well-diversified, less risky investments.

Earnings. An adequately capitalized, growing bank should have a consistent pattern of capital augmentation via earnings retention. Poor earnings can have a negative effect on capital adequacy in two ways. First, any losses absorbed by capital reduce the ability of the remaining capital to fulfill that function. Second, the impact of losses on capital is magnified by the fact that a bank generating losses is incapable of replenishing its capital accounts internally.

Funds management. A bank with undue levels of interest-rate risk should be required to strengthen its capital positions, even though it may meet the minimum risk-based capital standards. Assessments of capital adequacy should reflect banks' appropriate use of hedging instruments. Other things being equal, banks that have appropriately hedged their interest-rate exposure will be permitted to operate with lower levels of capital than those banks that are vulnerable to interest-rate changes. While the Federal Reserve does not want to discourage the use of legitimate hedging vehicles, some instruments, in particular interest-only strips (IOs) and principal-only strips (POs), raise concerns. IOs and POs have highly volatile price characteristics as interest rates change and are generally not considered appropriate investments for most banks. However, some sophisticated banks may have the expertise and systems to appropriately use IOs and POs as hedging vehicles.

Off-balance-sheet items and activities. Once funded, off-balance-sheet items become subject to the same capital requirements as on-balance-sheet items. A bank's capital levels should be sufficient to support the quality and quantity of assets that would result from a significant portion of these items being funded within a short time.

Adequacy of and Compliance with Capital-Improvement Plans

Capital-improvement plans are required for banks operating with capital ratios below regulatory minimums as required by the prompt-corrective-action part of the Federal Deposit Insurance Act, as well as for some banks operating under supervisory actions. Examiners should review any such plans and determine their adequacy and reasonableness, keeping in mind that banks may meet required capital-to-asset ratios in three ways:

- They may issue more capital. In doing so, banks must weigh the need for additional capital against the dilution of market value that will result.
- They may retain earnings rather than paying them out as dividends.
- They may sell assets. By reducing the amount of total assets, a bank reduces the amount of capital necessary to meet the required ratios.

Inadequate Allowance for Loan and Lease Losses

An inadequate allowance for loan and lease losses (ALLL) will require an additional charge to current income. Any charge to current income will reduce the amount of earnings available to supplement tier 1 capital. Because the amount of the ALLL that can be included in tier 2 capital is limited to 1.25 percent of gross risk-weighted assets, an additional provision may increase the ALLL level above this limit, thereby resulting in the excess portion being excluded from tier 2 capital.

Ineligible Collateral and Guarantees

The risk-based capital guidelines recognize only limited types of collateral and guarantees. Other types of collateral and guarantees may support the asset mix of the bank, particularly within its loan portfolio. Such collateral or guarantees may serve to substantially improve the overall quality of a loan portfolio and other credit exposures, and should be considered in the overall assessment of capital adequacy.

Market Value of Bank Stock

Examiners should review trends in the market price of the bank's stock and whether stock is trading at a reasonable multiple of earnings or a reasonable percentage (or multiple) of book value. A bank's low stock price may merely be an indication that it is undervalued, or it may be indicative of regional or industrywide problems. However, a low-valued stock may also indicate that investors lack confidence in the institution; such lack of support could impair the bank's ability to raise additional capital in the capital markets.

Subordinated Debt in Excess of Limits

The total of term subordinated debt and intermediate-term preferred stock that may be included in tier 2 capital is limited to 50 percent of tier 1 capital. Amounts issued or outstanding in excess of this limit are not included in the risk-based capital calculation but should be taken into consideration when assessing the bank's funding and financial condition.

Unrealized Asset Values

Banks often have assets on their books that are carried at significant discounts below current market values. The excess of the market value over the book value (historical cost or acquisition value) of assets such as investment securities or banking premises may represent capital to the bank. These unrealized asset values are not included in the risk-based capital calculation but should be taken into consideration when assessing capital adequacy. Particular attention should be given to the nature of the asset, the reasonableness of its valuation, its marketability, and the likelihood of its sale.

LEVERAGE RATIO FOR STATE MEMBER BANKS

The Federal Reserve has adopted a minimum ratio of tier 1 capital to average total assets to assist in the assessment of the capital adequacy of state member banks. The principal objective of this measure, which is intended to be used as a supplement to the risk-based capital measure, is to place a constraint on the maximum degree to which a state member bank can leverage its equity capital base.

The guidelines implementing the leverage ratio are found in Regulation H (12 CFR 208), appendix B, and apply to all state member banks on a consolidated basis. The ratio is to be used in the examination and supervisory process, as well as in the analysis of applications acted upon by the Federal Reserve.

A bank's leverage ratio is calculated by dividing its tier 1 capital (the numerator of the ratio) by its average total consolidated assets (the denominator of the ratio). For purposes of calculating this ratio during an examination, examiners may use the bank's average total

assets as of the last call report date. This ratio may also be calculated using period-end assets whenever necessary, on a case-by-case basis. For the purpose of this leverage ratio, the definition of tier 1 capital for year-end 1992 as set forth in the risk-based capital guidelines contained in appendix A of the Federal Reserve's Regulation H is used. Average total consolidated assets are defined as the quarterly average total assets reported on the bank's call report, less goodwill, MSAs, NMSAs, and PCCRs that, in the aggregate, are in excess of 100 percent of tier 1 capital and PCCRs and NMSAs in excess of 50 percent of tier 1 capital, and any other intangible assets and investments in subsidiaries that the Federal Reserve determines should be deducted from tier 1 capital.

Under the leverage ratio guidelines, the minimum level of tier 1 capital to average total assets for state member banks is 3 percent. An institution operating at or near this level is expected to have well-diversified risk, including no undue interest-rate-risk exposure, excellent asset quality, high liquidity, and good earnings; and to generally be considered a strong banking organization, rated composite 1 under the CAMELS rating system of banks.

Institutions not meeting these characteristics, as well as institutions with supervisory, financial, or operational weaknesses, are expected to operate well above minimum capital standards. Institutions experiencing or anticipating significant growth are also expected to maintain capital ratios, including tangible capital positions, well above the minimum levels. For example, most such banks generally have operated at capital levels ranging from 100 to 200 basis points above the stated minimums. Higher capital ratios could be required if warranted by the particular circumstances or risk profiles of individual banks. Thus, for all but the most highly rated banks meeting the conditions set forth above, the minimum leverage ratio is 3 percent plus an additional cushion of at least 100 to 200 basis points. In all cases, banking institutions should hold capital commensurate with the level and nature of all risks, including the volume and severity of problem loans, to which they are exposed.

A bank that does not have a 4 percent leverage ratio (3 percent if it is rated a composite CAMELS 1 and meets the other conditions set forth above) is considered undercapitalized under the prompt-corrective-action framework and must file a capital-restoration plan that meets certain requirements.

De Novo Banks

Initial capital in a de novo state member bank should be reasonable in relation to the bank's location, business plan, competitive environment, and state law. At a minimum, however, a de novo bank must maintain a tangible tier 1 leverage ratio (core capital elements minus all intangible assets divided by average total assets minus all intangible assets) of 9 percent for the first three years of operations. The applicant must provide projections of asset growth and earnings performance that reasonably support the bank's ability to maintain this ratio without reliance on additional capital injections. This policy also applies to newly converted commercial banks through the third year of existence and generally to other types of institutions that become Federal Reserve members (for example, industrial banks, thrifts, and Edge Act companies) for a three-year period beginning from the date following consummation. Any exceptions to this policy for converted banks should be discussed with Board staff. Even though a 9 percent tangible leverage ratio is not required after the third year, de novo banks are expected to maintain capital ratios commensurate with ongoing safety-and-soundness concerns and, generally, well in excess of regulatory minimums.

1. To determine the adequacy of capital.
2. To determine compliance with the risk-based and tier 1 leverage capital adequacy guidelines.
3. To determine if the policies, practices, and procedures with regard to the capital adequacy guidelines are adequate.
4. To determine if the bank's officers and employees are operating in conformity with the Board's established capital adequacy guidelines.
5. To evaluate the propriety and consistency of the bank's present and planned level of capitalization in light of the risk-based and leverage capital guidelines, as well as existing conditions and future plans.
6. To initiate corrective action when policies, procedures, or capital are deficient.
7. To evaluate whether—
   a. the institution is fully capable of assessing the credit risk associated with the collateralized loan obligations (CLOs) it retains in its banking book (nontrading accounts); and
   b. the institution is adequately capitalized given its residual risk exposure involving CLOs.

VERIFICATION OF THE RISK-BASED CAPITAL RATIO

Examiners should verify that the bank has adequate systems in place to compute and document its risk-based capital ratios. Small banks with capital ratios well in excess of established minimums may not have a system explicitly designed to capture risk-based capital information. In addition, depending on a bank's current capital structure and ratios, all procedures may not apply.

1. Verify that the bank is correctly reporting risk-based capital information requested on its Reports of Condition and Income.

For the qualifying components of capital:

2. Determine if management is adhering to the underlying terms of any currently outstanding stock issues.
3. Review common stock to ensure that the bank is in compliance with the terms of any underlying agreement(s) and to determine if more than one class exists. When more than one class exists, review the terms for any preference or nonvoting features. If the terms include such features, determine whether the class of common stock qualifies for inclusion in tier 1 capital.
4. Review any perpetual and long-term preferred stock for the following:
   a. Compliance with terms of the underlying agreement(s) carefully noting—
      • adherence to the cumulative or noncumulative nature of the stock, and
      • adherence to any conversion rights.
   b. Proper categorization as tier 1 or tier 2 for capital adequacy purposes, noting the following requirements:
      • Tier 1 perpetual preferred stock must have the following characteristics:
        — no maturity date
        — cannot be redeemed at the option of the holder
        — unsecured
        — ability to absorb losses
        — ability and legal right for issuer to defer or eliminate dividends
        — any issuer redemption feature must be subject to Federal Reserve prior approval
        — noncumulative
        — fixed rate or traditional floating or adjustable rate
        — must not contain features which would require or create an incentive for the issuer to redeem or repurchase the instrument, such as an "exploding rate," an auction-rate pricing mechanism, or a feature that allows the stock to be converted into increasing numbers of common shares.
      • Perpetual preferred stock, includable within tier 2 capital without a sublimit, must have characteristics (a) through (f) listed above for tier 1 perpetual preferred stock, but does not otherwise qualify for inclusion in tier 1 capital. For example, cumulative or auction-rate perpetual preferred stock, which do not qualify for tier 1 capital, may be includable in tier 2 capital.
5. Verify that minority interest in equity accounts of consolidated subsidiaries included in tier 1 capital consists of tier 1 capital elements. Determine whether any perpetual preferred stock of a subsidiary that is included in minority interest is secured by the subsidiary's assets; if so, that stock may not be included in capital.
6. Review the intermediate-term preferred stock and subordinated debt instruments included in capital for the following:
   a. Compliance with terms of the underlying agreement(s), noting that subordinated debt containing the following terms may not be included in capital:
      • interest payments tied to the bank's financial condition
      • acceleration clauses or broad conditions of events of default that are inconsistent with safe and sound banking practices.
   b. Compliance with restrictions on the inclusion of such instruments in capital by verifying that the aggregate amount of both types of instruments does not exceed 50 percent of tier 1 capital (net

of goodwill) and that the portions includable in tier 2 capital possess the following characteristics:
- unsecured
- minimum five-year original weighted average maturity
- in the case of subordinated debt, contains terms stating that the debt (1) is not a deposit, (2) is not insured by a federal agency, (3) cannot be redeemed without prior approval from the Federal Reserve, and (4) is subordinated to depositors and general creditors.

c. Appropriate amortization, if the instruments have a remaining maturity of less than five years.

7. Determine, through review of minutes of the board of directors meetings, if a stock offering or subordinated debt issue is being considered. If so, determine that management is aware of the risk-based capital requirements for inclusion in capital.
8. Review any mandatory convertible debt securities for the following:
   a. Compliance of the terms with the criteria set forth in 12 CFR 225 (Regulation Y), appendix B.
   b. Notification in the terms of agreement that the redemption or repurchase of such securities before maturity is subject to prior approval from the Federal Reserve.
   c. The treatment of the portions of such securities covered by the issuance of common or perpetual preferred stock dedicated to the repayment of the securities, bearing in mind the following:
      - the amount of the security covered by dedicated stock should be treated as subordinated debt and is subject, together with other subordinated debt and intermediate-term preferred stock, to a sublimit within tier 2 capital of 50 percent of tier 1 capital, as well as to amortization in the last five years of life.
      - the portion of a mandatory convertible security that is not covered by dedication qualifies for inclusion in tier 2 capital without any sublimit and without being subject to amortization in the last five years of life.
9. Verify that the amount of the allowance for loan and lease losses included in tier 2 capital has been properly calculated.

For the calculation of risk-weighted assets:

10. Verify that each on- and off-balance-sheet item has been assigned to the appropriate risk category in accordance with the risk-based capital guidelines. Close attention should be paid to the underlying obligor, collateral, and guarantees, and to assignment to a risk category based upon the terms of a claim. The claim should be assigned to the risk category appropriate to the highest risk option available under the terms of the transaction. Verify that the bank's documentation supports the assignment of preferential risk weights. If necessary, recalculate the value of risk-weighted assets.
11. Verify that all off-balance-sheet items have been converted properly to credit-equivalent amounts based on the risk-based capital guidelines. Close attention should be paid to the proper reporting of assets sold with recourse, financial and performance standby letters of credit, participations of off-balance-sheet transactions, and commitments.

VERIFICATION OF THE TIER 1 LEVERAGE RATIO

12. Verify that the bank has correctly calculated tier 1 capital in accordance with the definition of tier 1 capital for year-end 1992 as set forth in the risk-based capital guidelines.
13. Verify that the bank has properly calculated average total consolidated assets, which are defined as the quarterly average total assets as reported on the call report, less goodwill and any other intangible assets and any investments in subsidiaries that the Federal Reserve determines should be deducted from tier 1 capital.

OVERALL ASSESSMENT OF CAPITAL ADEQUACY

14. For banks that do not meet the minimum risk-based tier 1 leverage capital standards or that are otherwise considered to lack sufficient capital to support their activities,

examine the bank's capital plans for achieving adequate levels of capital and determine whether they are acceptable to the Federal Reserve in conjunction with the Reserve Bank's management. Review and comment on these plans and any progress achieved in meeting the requirements.

15. The review processes entailed in "Overall Conclusions Regarding Condition of the Bank," section 5020.1, require an evaluation of the propriety and consistency of the bank's present and planned level of capitalization in light of existing conditions and future plans. In this regard, the examiner assigned to assessing capital adequacy should—
    a. Using the latest Uniform Bank Performance Report (UBPR), analyze applicable ratios involving capital funds, comparing these ratios with those of the bank's peer group and investigating trends or significant variations from peer-group averages.
    b. Determine that capital is sufficient to compensate for any instabilities or deficiencies in asset and liability mix and quality mentioned in the "funds management" paragraph ("Financial Considerations" subsection).
    c. Determine if the bank's earnings performance enables it to fund its expansion adequately, to remain competitive in the market, and to replenish and/or increase its capital funds as needed.
    d. Analyze trends in the bank's deposit and borrowed funds structure to determine whether capital is maintained at a level sufficient to sustain depositor and lender confidence.
    e. If the reserve for loan losses is determined to be inadequate, analyze the impact of current and potential losses on the bank's capital structure. See "Analytical Review and Income and Expense," section 4010.1.
    f. Consider the impact of any management deficiencies on present and projected capital.
    g. Determine if there are any assets or contingent accounts whose quality represents an actual or potential serious weakening of capital.
    h. Consider the potential impact, should approval be given, of any proposed changes in controlling ownership on the projected capital position.
    i. Analyze assets which are considered undervalued on the balance sheet and carried at below-market values. The excess of market value over cost may represent an additional cushion to the bank.
    j. Consider the cushion for absorbing losses that may be provided by any subordinated debt or intermediate-term preferred stock not included in tier 2 capital because of the 50 percent of tier 2 capital limitation or that is not included in capital for tier 1 leverage ratio purposes.
    k. Analyze any collateral and guarantees supporting assets that may not be taken into account for risk-based or tier 1 leverage capital purposes and consider these in the overall assessment of capital adequacy.
    l. Evaluate the bank's overall asset quality and determine whether the bank needs to strengthen its capital position based on the following:
        - the severity of problem and classified assets
        - investment or loan portfolio concentrations
        - the adequacy of loan-loss reserves
    m. Analyze the bank's interest-rate risk and use of hedging instruments. Determine if the bank should strengthen its capital position based on undue levels of risk. Review hedging instruments for use of IOs and POs (which raise concerns), and management's expertise in using hedging instruments.
    n. Determine whether the sponsoring bank is able to assess and manage the retained risk in its credit portfolio after the issuance of synthetic collateralized loan obligations.
    o. If the bank has used the special risk-based regulatory capital treatment for synthetic CLOs, verify that the stringent minimum conditions have been met for that treatment.
16. Review capital adjustments such as goodwill and intangible assets by performing the following procedures:
    a. Verify the existence of adequate documentation concerning original and carrying values and the amortization method.
    b. Verify that intangibles are being reduced in accordance with the amortization

method, and that if the carrying amount exceeds the value, the intangible is written down or off.
   c. Determine if the bank is performing a quarterly review of the level and quality of all intangibles.
   d. Verify that goodwill and nonqualifying identifiable intangibles are deducted from tier 1 capital.
   e. Determine the proper inclusion of other identifiable intangibles included in tier 1 capital by verifying that the criteria outlined in the risk-based capital guidelines are met.
17. In light of the analysis conducted in step 15, and in accordance with the Federal Reserve's capital adequacy guidelines, determine any appropriate supervisory action with regard to the bank's capital adequacy.
18. Review the following items with the examiner-in-charge in preparation for discussion with appropriate management:
   a. all deficiencies noted with respect to the capital accounts
   b. adequacy of present and projected capital
19. Ascertain through minutes, reports, etc., or through discussions with management, how the future plans of the bank (for example, growth through commercial lending, retail operations, etc.) will affect the bank's asset quality, capital position, and other areas of its balance sheet.
20. Prepare comments for the examination report on the bank's capital position, including any deficiencies noted.
21. Update the workpapers with any information that will facilitate future examinations.

Review the bank's internal controls, policies, practices, and procedures concerning capital. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used, and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

GENERAL

1. Has the bank established procedures to ensure that—
   a. all components of capital are accurately categorized and reported for purposes of the risk-based and leverage capital measures?
   b. all on-and off-balance-sheet items are accurately risk-weighted and reported for purposes of the risk-based capital measures?
   c. categorization of on- and off-balance-sheet items and capital for purposes of the risk-based capital measures is adequately documented?
   d. the bank is in compliance with the terms of any contractual agreements underlying capital instruments?
   e. management and the board of directors consider the requirements of the risk-based capital guidelines for inclusion in capital of stock or debt prior to issuance?
2. Does the bank prepare a periodic analysis of its risk-based and leverage capital positions to assess capital adequacy for both current and anticipated needs?

*3. Has the board of directors authorized specific bank officers to—
   a. sign stock certificates?
   b. maintain custody of unissued stock certificates?
   c. maintain stock journals and records?

*4. Are capital transactions verified by more than one person before stock certificates are issued?

*5. Are stock certificates and debentures handled by persons who do not also record those transactions?

*6. Does the bank maintain a stock certificate book with certificates serially numbered by the printer?

*7. Is the stock certificate book maintained under dual control?

*8. Does the bank's policy prohibit the signing of blank stock certificates?

*9. Does the bank maintain a shareholders' ledger that shows the total number of shares owned by each stockholder?

*10. Does the bank maintain a stock transfer journal disclosing names, dates, and amounts of transactions?

*11. Does the bank cancel surrendered stock certificates?

*12. Are inventories of unissued notes or debentures—
   a. maintained under dual control?
   b. counted periodically by someone other than the person responsible for their custody?

*13. When transfers are made—
   a. are notes or debentures surrendered and promptly cancelled?
   b. are surrendered notes or debentures inspected to determine that proper assignment has been made and that new notes or debentures agree in amount?

CONCLUSION

14. Indicate additional procedures used in arriving at conclusions.
15. Are internal controls of capital adequate based on a composite evaluation, as evidenced by answers to the foregoing questions?